

**DEPARTMENT OF DEFENSE AUTHORIZATION FOR  
APPROPRIATIONS FOR FISCAL YEAR 2015 AND  
THE FUTURE YEARS DEFENSE PROGRAM**

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**HEARINGS**

BEFORE THE

**COMMITTEE ON ARMED SERVICES  
UNITED STATES SENATE**

ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

ON

**S. 2410**

TO AUTHORIZE APPROPRIATIONS FOR FISCAL YEAR 2015 FOR MILITARY  
ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CON-  
STRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF  
ENERGY, TO PRESCRIBE MILITARY PERSONNEL STRENGTHS FOR  
SUCH FISCAL YEAR, AND FOR OTHER PURPOSES

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**PART 2**

**SEAPOWER**

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APRIL 2 AND 10, 2014



DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2015 AND THE FUTURE YEARS DEFENSE PROGRAM—Part 2  
SEAPOWER

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**DEPARTMENT OF DEFENSE AUTHORIZATION  
OF APPROPRIATIONS FOR FISCAL YEAR  
2015 AND THE FUTURE YEARS DEFENSE  
PROGRAM**

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**WEDNESDAY, APRIL 2, 2014**

U.S. SENATE,  
SUBCOMMITTEE ON SEAPOWER,  
COMMITTEE ON ARMED SERVICES,  
*Washington, DC.*

**MARINE CORPS MODERNIZATION**

The subcommittee met, pursuant to notice, at 9:18 a.m. in room SR-222, Russell Senate Office Building, Senator Jack Reed (chairman of the subcommittee) presiding.

Committee members present: Senators Reed, Blumenthal, Kaine, King, McCain, Sessions, and Wicker.

**OPENING STATEMENT OF SENATOR JACK REED, CHAIRMAN**

Senator REED. The hearing will come to order. First, let me thank Senator McCain and my colleagues for moving up the start time by about 15 minutes. There's a vote at 10 a.m. that I'm very much involved in. The current plan is that Senator King will vote immediately and come over here and the hearing will continue forward. But again, let me thank you all for your presentations and for your presence today.

I want to particularly welcome General John M. Paxton, Jr., USMC, the Assistant Commandant of the U.S. Marine Corps; and Lieutenant General Kenneth J. Glueck, Jr., USMC, the Deputy Commandant, Combat Development and Integration, and Commanding General, Marine Corps Combat Development Command of the U.S. Marine Corps. Thank you, gentlemen, for your presence, for your service, and for your commitment to your marines and to the Nation. Thank you very much.

The Marine Corps has been in a transition for about 2 years or more from an appropriate focus on generating forces to support counterinsurgency operations and stability operations in Iraq and Afghanistan and back to its more historical role of force in readiness, forward stationed, deployed, and ready for crisis response. This transition has been and will continue to be complicated by fiscal uncertainty, including sequestration, end strength, and force structure reductions, and nagging struggles with combat vehicle modernization based on the interacting challenges of technology and affordability.

Today, our witnesses will update us on their efforts to build a globally capable crisis response force of amphibious, combat, and tactical ground vehicles that meets the Nation's requirements for maneuver from the sea, that is technologically achievable and affordable. We understand that based on its most recent technology studies, the Marine Corps has once again reordered its amphibious combat vehicle (ACV) priorities. Instead of developing and fielding a new high water speed Armored Amphibious Combat Vehicle (AACV), the Marine Corps will accelerate the development and fielding of a Marine Personnel Carrier (MPC).

We look forward to our witnesses describing for us how the Marine Corps has reassessed its priorities relative to its missions and requirements under the current defense strategy and how it now proposes to sequence its vehicle development and acquisition efforts to meet deployed forces' requirements for armored amphibious and tactical mobility ashore, and at the same time better control the portfolio's affordability.

We must note, unfortunately, that the Marine Corps' painstaking rationalization of its combat and tactical vehicle portfolio is at risk if sequestration, as required by the Budget Control Act (BCA), is triggered for fiscal year 2016 and beyond. No doubt, sequestration at any point on the development schedule compounds the challenges to all Marine Corps programs. We'd like our witnesses to address the impacts and risks of fiscal instability in additional years of sequestration, including any extraordinary budget pressures associated with continuing operations in Afghanistan.

Last year I emphasized what I considered the central planning issue facing the Marine Corps regarding the appropriate size and structure of the Nation's armored amphibious assault capability and the mix of armored combat and tactical vehicles—and ship-to-shore connectors—to support the Nation's defense strategy. Coming off the cancellation of the Expeditionary Fighting Vehicle (EFV) in 2011 and the affordability tradeoffs made with respect to the cost of the system and numbers of Amphibious Assault Vehicles (AAV) during the program's development, several questions were raised about the tactical implications of the scope and pace of the buildup of combat power ashore and the risks to mission success.

I remain concerned that substituting wheeled MPCs or Armored Personnel Carriers (APC) for amphibious tractors could erode the Marine Corps' amphibious assault capability—the capability that separates the Marine Corps from the other Services of the Nation. I look forward to an update on the fleet mix study, its findings, if any, and continuing our discussion of this issue.

Finally, and related to our interest in the challenges of modern operations from the sea, we observed last year that the Marine Corps has rejuvenated major amphibious exercises that will, so to speak, stretch some tactical muscles that have not been exercised in many years. We'd welcome your views on the results of these exercises and what the Marine Corps has learned about joint and combined amphibious operations concepts, equipment, and readiness. We are particularly interested in any insights regarding the performance of the Marine Corps current fleet of amphibious, combat, and tactical vehicles.



The Nation could not be more proud of what the marines and their families have accomplished over the last decade, and in fact, the history of the country. We're deeply grateful and ask you to pass our thanks on to your marines. Thank you.

Senator McCain.

#### STATEMENT OF SENATOR JOHN MCCAIN

Senator MCCAIN. Thank you, Mr. Chairman. I will ask to submit my opening statement for the record, given the fact that we have a vote beginning at 10 a.m.

I just would add one caution to our witnesses. The EFV was a disaster. I want to make sure that we never repeat a \$3 billion mistake again.

I thank you, Mr. Chairman. I submit my opening statement for the record.

[The prepared statement of Senator McCain follows:]

#### PREPARED STATEMENT BY SENATOR JOHN MCCAIN

Thank you, Senator Reed, I join you in welcoming our distinguished panel of witnesses and thank you for holding this important hearing.

We are here today to discuss Marine Corps modernization as part of their fiscal year 2015 budget request. The fiscal year 2015 President's budget request draws down Marine Corps end strength to 175,000 by the end of fiscal year 2017, from 182,700 in fiscal year 2015.

We live in troubling times, with more instability and unrest around the world than we've seen in recent history. I believe the drop to dangerously low end strength levels will impact the ability of the Marine Corps to respond effectively to national security contingencies and global crises when we need the Corps to do so.

In the fiscal year 2015 budget request, the Marine Corps has been forced to trade future readiness and infrastructure investments in order to finance near-term readiness. While this reflects the right priority, it achieves this trade-off at a very high price.

The base budget request for the procurement of Marine Corps, not including the amphibious ship program, is \$983.3 million—roughly 28 percent less than the fiscal year 2014 enacted level. Even with the Navy taking a great deal of pressure off Marine Corps procurement accounts by funding Marine Corps aviation and amphibious ship programs, I am concerned with the affordability of, among other things, the Marine Corps' ground vehicle program. Applying fiscal scrutiny to defined operational requirements is especially important here since, as General Amos put it, 62 cents of every dollar goes towards compensation and benefits. The horror story that was the Expeditionary Fighting Vehicle program, which was cancelled after nearly \$3 billion was sunk into it without delivering any appreciable combat capability, cannot be repeated. Quite simply, the Marine Corps can't afford to repeat that grievous mistake.

Indeed, the modernization of the Marine Corps' ground combat vehicle capabilities is essential to the Marine Corps' ability to execute current and future operations. The fiscal year 2015 budget request includes funding for the procurement of the Joint Light Tactical Vehicle; development of the Amphibious Combat Vehicle; and sustainment of the High Mobility Multi-Purpose Wheeled Vehicle fleet. This subcommittee would be interested in hearing how the Marine Corps is managing these programs so that their acquisition and sustainment costs are affordable in not only today's fiscal environment but also that of the future. We would also like to know how these programs will be incorporated operationally into the pivot to the Pacific.

I am disappointed there has not been much change in the Navy shipbuilding for amphibious ships from last year. The Marine Corps still has a requirement for 38 amphibious ships to support the Marine Corps mission. But the Navy's shipbuilding plan calls for only 30 ships by the end of fiscal year 2015 and 33 amphibious ships by the end of 2019. This has forced the Marine Corps to employ Special Purpose Marine Air-Ground Task Forces (MAGTFs) which essentially means they have MAGTFs employed ashore because the shortfall in amphibious ships.

Finally, I believe that the Commandant's decision to delay the near-term acquisition of a high water-speed amphibious vehicle for ship-to-shore maneuvers was a prudent move given the current fiscal environment. But I wonder if the near-term

solution changes Marine Corps doctrine or is simply driven by affordability concerns. In other words, is our acquisition strategy influencing doctrine, or the other way around?

In summary, I believe that all members of this subcommittee will want to fully understand how the Marine Corps has realigned its limited resources with the fiscal realities and operational requirements it faces today and is likely to face tomorrow. It is our responsibility to ensure the Marine Corps has the resources required to execute its mission in defense of our Nation. With that in mind, I look forward to the testimony of all the witnesses.

Senator REED. Thank you very much, Senator McCain.  
General Paxton, please.

**STATEMENT OF GEN. JOHN M. PAXTON, JR., USMC, ASSISTANT  
COMMANDANT, U.S. MARINE CORPS**

General PAXTON. Thank you, Mr. Chairman. Chairman Reed, Ranking Member McCain, distinguished members of the subcommittee: Thank you for the opportunity to report on modernization investments in your U.S. Marine Corps.

Today, as always, the Marine Corps is committed to remaining as our Nation's force in readiness and a force that's truly capable of responding to any crisis anywhere around the globe at a moment's notice. As we gather here today and, Senator, as we spoke earlier, we have some 37,000 marines who are forward deployed, promoting peace, protecting the national interest, and securing our defense.

To your specific point about examples, sir, we do have 2 Marine Expeditionary Units (MEU) and 6,200 marines over off the eastern coast of Korea right now exercising with our allies and counterparts over there. In addition, there are more than 6,000 marines in Afghanistan who continue to make a huge difference to our Nation, our allies, and the world.

All your marines forward remain well-trained, well-equipped, well-led, and at a high state of readiness. Our readiness was proven last year, and if I may offer you just two examples here, when the Marine Corps displayed agility, responsiveness, and saving lives, first in the aftermath of the Super Typhoon in the Philippines in November, and then shortly thereafter when we did a rescue mission of some American citizens in South Sudan over the Christmas time. Both of these events demonstrate the reality and the obligation of maintaining a combat-ready force that's capable of handling today's crisis today. Such an investment is essential to maintaining our Nation's security and our prosperity for the future.

We fully appreciate that our readiness today and the ability to maintain it in the future are directly related to the innovations and investments we continue to make in the refinement of expeditionary amphibious concepts and the necessity to modernize decades-old equipment. All of this must be accomplished in concert with the fiscal realities that we face and particularly in the Department of Defense (DOD) budget.

As our Nation continues to face those uncertainties, we're making hard but necessary choices to protect our near-term readiness, and also to put the Marine Corps on the best trajectory to meet future defense requirements. I look forward to the opportunity to elaborate on some examples of those choices that we have made.

As we navigate the fiscal environment, if I may, I'd just like to remind you of the five pillars by which we grade ourselves for Marine Corps readiness: first and foremost, the recruiting and retention of high quality people; second, maintaining a high state of unit readiness; third, our ability to meet combatant commander demand requirements; fourth, ensuring that we maintain appropriate infrastructure for investments; and then fifth, keeping an eye towards investment for the future and the capabilities we'll need for tomorrow's challenges.

Sir, just in closing, if I may, just three short examples here to highlight how all these pillars are unique to the modernization that we came here to testify about today. First, the Marine Corps has and will source our best trained and most ready units to keep them forward to meet combatant command requirements. In doing so, the Marine Corps will protect readiness today with the realization that our modernization investments may be negatively impacted over the long-term. In fact, the Marine Corps has accepted the greatest amount of risk in this particular area. Such tradeoffs portend future risks for us in the costs involved in maintaining long-term readiness.

Second, the Marine Corps, as always, does not man the equipment; we equip the marine. Therefore, in anticipation of the emerging national security environment, what we call the new normal, and our continued drawdown in Afghanistan, the Marine Corps is continuing to look at how we identify equipment that we will need to best retain, to reset, or to divest.

Additionally, while balancing capabilities and costs, the Marine Corps will continue its look at critical investments and in particular for this subcommittee, sir, the ACV, the Joint Strike Fighter (JSF), and Advanced Radar, to name a few. We will endeavor to posture ourselves so your U.S. Marine Corps is most ready when the Nation is least ready.

Then third and finally, sir, just a reminder that we will continue to be, as always, naval in heritage, naval in partnership, and naval in outlook. We will continue to look at the future, realize that we have to be sea-based, forward deployed naval forces that provide day-to-day engagement, crisis response, and assured access to the global commons. So, a critical component there is to build, train, and maintain an expeditionary forward presence that is both available and ready on amphibious shipping.

So, sir, if I may, I'll just delay the rest of the oral statement, if I may submit that for the record, sir. I thank you for the opportunity and look forward to the questions.

[The joint prepared statement of General Paxton and General Glueck follows:]

JOINT PREPARED STATEMENT BY GEN. JOHN M. PAXTON, JR., USMC, AND  
LT. GEN. KENNETH J. GLUECK, JR., USMC

#### INTRODUCTION

Chairman Reed, Senator McCain, and distinguished members of this subcommittee, we appreciate the opportunity to appear here today and discuss Marine Corps modernization. As always, we thank you for your continued support to our sailors, marines, and their families.

The Marine Corps remains the Nation's premiere Expeditionary Force in Readiness. This means that we remain most ready when the Nation is least ready to an-

answer the call globally and respond to all matter of unforeseen events. We operate capably and freely throughout the spectrum of threats, whether they are conventional, irregular or the uncertain hybrid areas where they overlap. Our ability to deploy from the sea in austere environments at a time and place of our choosing—a significant asymmetric, strategic, and operational advantage—remains our most important characteristic.

Our modernization investments allow us to develop and sustain a ready and flexible force that serves as a highly effective hedge against global and regional instability. Our innovative spirit, strong leadership, and enduring stewardship of the Nation's resources guide our modernization efforts. We invest in our marines as they are the foundation of the Marine Corps. We continue to reset our warfighting equipment and reconstitute our force after more than a decade of combat operations. We maintain our investments in the research and development of new equipment and technologies that ensure our Nation's crisis response force remains relevant and ready well into the 21st century.

However, as fiscal realities shrink the Department of Defense's budget, the Marine Corps has forgone some investments to maintain near-term readiness. These trades cannot be sustained long-term and portend future increased costs. As America's crisis response force, however, your Corps does not have a choice. We are required to maintain a posture that facilitates our ability to deploy today. As we continue to face the possibility of further budget reductions under sequestration, we may be forced into adopting some variation of a less ready, temporarily tiered status, within the next few years in order to make critical investments that are being deferred today.

#### OPERATING ENVIRONMENT

##### *Afghanistan*

In the past year, marines in Afghanistan have transitioned from counter-insurgency operations to training, advising, and assisting the Afghan National Security Forces (ANSF). With expanding capabilities and increased confidence, the ANSF is firmly in the lead for security in support of the Government of the Islamic Republic of Afghanistan throughout Helmand and Nimroz Provinces.

Today, more than 4,000 Active and Reserve marines are forward deployed in Regional Command Southwest (RC(SW)) in support of the Afghan National Police (ANP), and Afghan National Army (ANA). In 2013, we reduced our coalition force advisory teams from 43 to 15, and shifted our emphasis from tactical operations to Brigade-level planning, supply chain management, infrastructure management, and healthcare development. In January 2013, there were over 60 ISAF (principally U.S., U.K., and Georgian) bases in RC(SW). Today only seven remain. In addition, we removed permanent coalition presence in 7 of 12 districts with Marine forces located in only 1 remaining district center.

##### *Globally Engaged*

As we transition out of Afghanistan, your Marine Corps remains a forward stationed and forward deployed force operating "in every clime and place." As part of the strategic shift outlined in the 2012 Defense Strategic Guidance we have strengthened our ties with our Pacific partners. Marines forward deployed and based in the Asia-Pacific Theater conduct more than 70 exercises a year, all designed to increase interoperability with our regional partners, build theater security cooperation, and enhance prosperity and stability in this region. This year, the Marines will deploy a rotational force of 2,500 in Darwin, Australia to continue to expand this effort.

Throughout more than a decade of sustained operations ashore in Iraq, Afghanistan, and elsewhere, we continued to deploy thousands of Marines aboard amphibious warships around the globe. The Navy and Marine Corps team remains postured to provide persistent presence and engagement, maintaining a constant watch for conflict and regional unrest. Well-trained Marine units embarked aboard U.S. Navy warships increase the Nation's ability to deter and defend against emerging threats. Our adaptability and flexibility provide unmatched capabilities to combatant commanders, whose demand for these forces routinely exceeds our current resources.

In an effort to meet this growing demand, the Marine Corps has stationed additional crisis response forces in the form of Special Purpose MAGTFs (SP-MAGTF) ashore in support of U.S. Africa Command and U.S. European Command. These forces provide the combatant commanders a self-deploying and self-sustaining capability that can support U.S. and partner security interests throughout the theaters of operation, to include embassy reinforcement, non-combatant evacuation operations, and tactical recovery of aircraft and personnel even in periods of absence of

naval shipping. They demonstrated their unparalleled capability following the recent deterioration of the security situation in South Sudan. After receiving notification of their mission, SPMAGTF-CR staged their forces at Camp Lemonier, Djibouti on the Horn of Africa after traveling over 3,400 miles non-stop from Spain. The next day, marines flew to Uganda to prepare for a potential non-combatant evacuation operation and to bolster our East Africa Response Force.

#### *Future Environment*

If one characteristic defines the future operating environment it is uncertainty. Crises, whether natural disasters such as Typhoon Haiyan or manmade ones such as those in South Sudan, will continue to arise at an ever increasing pace. The 2014 Quadrennial Defense Review correctly states that “the international security environment remains uncertain and complicated. The United States will likely face a broad array of threats and opportunities and must prepare to address both effectively in the coming years.” Exacerbating these future threats is the nature of our adversary’s capabilities. We continue to see the power of disruptive technologies distributed to more diffused and decentralized actors. In what has been described as a ‘new normal,’ extremism, economic disruption, identity politics and social change generate new potential security threats at an accelerating pace.

In order to operate in this environment the Marine Corps maintains a solid operational and doctrinal foundation that incorporates proven concepts such as Operational Maneuver From the Sea, Ship-to-Objective Maneuver and Seabasing. With a renewed emphasis on expeditionary operations to respond to the threats encompassed in the ‘new normal,’ the Marine Corps undertook a deliberate effort to validate and enhance these concepts to ensure they remain valid far into the future. The results of this effort are codified in our new capstone concept: Expeditionary Force 21.

Expeditionary Force 21 establishes our vision and goals for the next 10 years and provides a plan for guiding the design and development of the future force that will fight and win in this environment. It will inform future decisions regarding how we will adjust our organizational structure to exploit the value of regionally focused forces and provide the basis for future Navy and Marine Corps capability development to meet the challenges of the 21st century. The vision for Expeditionary Force 21 is to provide guidance for how the Marine Corps will be postured, organized, trained, and equipped to fulfill the responsibilities and missions required around the world. Through Expeditionary Force 21 we intend to operate from the sea and provide the right sized force in the right place, at the right time.

#### RESET

We have made significant strides in resetting our equipment after 12 years of wartime wear and tear. We are executing a reset strategy that emphasizes both our commitment to the American taxpayer and the critical linkage of balancing reset and readiness levels. Over 77 percent of the Marine Corps equipment and supplies in RC(SW) has been retrograded. The Marine Corps requires continued funding to complete the reset of equipment still being utilized overseas, to reconstitute home station equipment, and to modernize the force.

The Marine Corps’ Operation Enduring Freedom Ground Equipment Reset Strategy, released in January 2012, guides the execution of our reset and divestiture strategy. The reset strategy prioritizes investment and modernization decisions to develop our force. Last year our reset liability was estimated at less than \$3.2 billion. Based on our recent plans for force drawdown, reduction in our enduring requirement for weapon systems, and aggressive efforts in identifying those items only absolutely required, we have refined that estimate for fiscal year 2015 and beyond to approximately \$1 billion. This revised forecast is primarily based on the replacement of combat losses, the restoration of items to serviceable condition, and the extension in service life of selected items. We anticipate further refinements over the coming months as we drawdown further and gain a more refined perspective on both the totality of the costs associated with returning our equipment from Afghanistan and the detailed costs associated with resetting that gear after over 12 years of combat. We currently estimate that reset funding will be needed for at least 24 months from the return of our last pieces of equipment from Afghanistan.

#### EQUIPMENT MODERNIZATION

With the smallest modernization budget in the Department of Defense, the Marine Corps continually seeks to leverage the investments of other services, carefully metering-out our modernization resources to those investment areas which are the

most fiscally prudent and those which promise the most operationally effective pay-offs.

Innovative warfighting approaches and can-do leadership are hallmarks of the Corps, but these cannot overcome the vulnerabilities created by our rapidly aging fleet of vehicles, systems and aircraft. As previously discussed, long-term shortfalls in modernization would have a detrimental impact on readiness and would ultimately cost lives during crises. At some point, sustaining fleets of severely worn vehicles becomes inefficient and no longer cost-effective. This inefficiency reduces available modernization resources from an already small account, degrading our ability to effectively operate in today's complex security environment.

#### *Amphibious Combat Vehicle*

The Amphibious Combat Vehicle (ACV) is the Marine Corps' top ground modernization priority and the fiscal year 2015 President's budget request includes \$106 million for this effort. Many of our systems show the signs of age, but none more than the current Amphibious Assault Vehicle (AAV) which has been in service since 1972. The legacy AAV has served the Corps well for over 40 years, but faces multiple component obsolescence issues that affect readiness, sustainment costs, safety, and our ability to respond from the sea. The ACV is needed to replace this aging fleet.

In 2011, we established an Amphibious Capabilities Working Group that examined current and emerging intelligence, surveillance, and reconnaissance capabilities, strike capabilities, and their integration into potential adversaries' approaches to anti-access, area denial (A2/AD). We noted, with particular concern, the impact (i.e. risk to mission and force) of future loitering top-attack munitions and the proliferation of guided rockets, artillery, missiles, and mortars among other advanced threats.

From this threat assessment, we concluded that we would either need to expand the scope, speed and duration of our shaping operations and littoral maneuver, or apply some combination of these actions. This systems approach may require the launch of initial forces from greater ranges offshore. Next, as part of the Marine Personnel Carrier (MPC) program we examined commercial off-the-shelf/non-developmental wheeled combat vehicles and discovered several important points. First, modern wheeled vehicles have substantially closed the maneuver performance gap that previously existed between tracked and wheeled vehicles with improved cross country performance and shore-to-shore swimming capability. Second, current wheeled vehicle technology contributes to improved protection against mines and improvised explosive devices.

We concluded that our concepts for operational maneuver from the sea and ship-to-objective maneuver remain valid, and we will continue to refine our complementary portfolio of capabilities to meet the evolving threats. The current ACV program has subsequently been refined to reflect a family of systems approach to the military problem—the necessity to conduct amphibious operations rapidly from further offshore while enhancing protected mobility for the mission on land. It leverages experience gained in the EFV program, the MPC program, threat analysis, and combat experience. It will be procured on a phased approach in concert with a revision to our concept of operations for littoral maneuver. ACV will initially provide an amphibious wheeled vehicle (Phase I) that complements the existing AAV and provides enhanced protected mobility ashore. The ACV could conduct most of its ship-to-shore movement via existing and programmed high-speed connectors. Our long-term effort (Phase II) will continue the research and development to explore capabilities that better enable us to conduct extended range littoral maneuver from ship to shore. The fruits of this phased effort are aimed at producing an amphibious vehicle capable of deploying from greater distances at greater speeds that ensure greater stand-off distances for our Naval Forces. Given continuing advancements in applicable technologies, we believe that further investment in these technologies will lead to the envisioned high water speed capability. While high-speed technology exists today, it currently requires too many capability and cost tradeoffs to be an acceptable solution.

#### *Amphibious Assault Vehicle Enhancements*

To maintain affordability and capacity in the interim, the Marine Corps is conducting only essential survivability and sustainment upgrades and only to a limited number of AAVs. This is a capability upgrade designed to improve force protection and vehicle survivability. An additional initiative to improve sustainability of the AAV fleet is being developed that will focus on obsolescence drivers and improving reliability that will allow the AAV to serve as an effective bridge until it is replaced by the ACV Phase II.

#### *Other Ground Programs*

Our ground vehicle modernization strategy is to sequentially modernize priority capabilities, reduce equipment inventory requirements wherever possible, and judiciously sustain remaining equipment. Our plans focus on achieving the right mix of assets, while balancing performance, payload, survivability, fuel efficiency, transportability and cost.

While the ACV remains the Marine Corps' number one priority, it will be part of a broader acquisition strategy aimed at providing the Marine Corps with balanced maneuver and mobility capabilities and capacities. This strategy involves retaining and recapitalizing portions of our Mine Resistant Ambush Protected (MRAP) vehicle and High Mobility Multipurpose Wheeled Vehicle (HMMWV) fleets. In addition to preserving these legacy systems we remain firmly partnered with the U.S. Army in fielding a Joint Light Tactical Vehicle (JLTV) that lives up to its name, while also being affordable.

#### *Mine Resistant Ambush Protected*

The Marine Corps has an enduring requirement to keep a large portion of our current MRAP fleet for future anticipated operations. We will place MRAPs in our Prepositioning Programs, with designated MEF units for potential use during contingencies, position them at various training and exercise locations and place several hundred in long- and short-term storage programs. The Marine Corps will divest a portion of the vehicles through inter-service transfer and to other partner nations who have identified a requirement as Excess Defense Articles. We will return the balance of our MRAPs currently in Afghanistan today leaving none to be demilitarized in theater.

#### *Joint Light Tactical Vehicle*

The JLTV is needed to provide the MAGTF with modern expeditionary light combat and tactical mobility while increasing the protection of our light vehicle fleet. Working closely with the Army as the lead Service, the Marine Corps is an equal partner in developing this key system in the tactical wheeled vehicle fleet of the joint force. The fiscal year 2015 budget request includes \$11.5 million for RDT&E and \$7.5 million for procurement of seven test vehicles. Between fiscal year 2016–2021 the Marine Corps will purchase and field a total of 5,500 vehicles which will replace approximately one-third of our legacy HMMWV fleet. The JLTV will greatly enhance reliability and survivability from these overburdened platforms that currently perform critical missions in unforgiving conditions.

#### *Light Armored Vehicle*

The fiscal year 2015 budget includes a request for \$77.7 million to address obsolescence issues in our 40-year-old Light Armored Vehicle (LAV) fleet. The upgrades made to the LAV family of vehicles will extend the life of this important platform and provide mobility, lethality, and survivability upgrades that are sorely needed to maintain the relevance of this unique platform on the battlefield. In addition to ensuring the operational effectiveness of these vehicles through 2035, it will align the main weapon system of the LAV-Anti-Tank variant with comparable systems already fielded in both the Marine Corps and the Army, increasing commonality and gaining overall efficiencies in the acquisition of parts and ammunition.

#### *Connectors*

Connectors, both aviation and surface, are the platforms that allow commanders the flexibility to employ and sustain forces from the seabase and amphibious warships. Connectors are the lynchpin to a core capability—the ability to project power from amphibious platforms and to maneuver once ashore. These connectors with enhanced speed and range, will provide future expeditionary force commanders greater flexibility to operate in contested environments. The President's budget includes \$191 million for the Ship-to-Shore Connector air-cushioned vehicles and \$4 million for the Surface Connector Replacement (SC(X)(R)) program that will replace the aging LCUs. These platforms are essential in connecting the combat power and logistical sustainment that the sea base provides, to our forces that are operating in the littorals and inland missions. The Navy Marine Corps team will continue to explore and invest in future connector options that will increase our ability to exploit the sea as maneuver space by increasing range, speed, and capacity.

#### *Ground/Air Task Oriented Radar*

In addition to our critical investments in mobility, the fiscal year 2015 budget includes a request for \$89.2 million to procure the next generation radar that will replace five of our legacy systems. These funds will provide two low rate initial production models to the Marine Corps. The Ground/Air Task Oriented Radar is a

multi-role, ground based, expeditionary radar that satisfies the capabilities requirements of both Marine Air Command and Control System and Counter Fire/Counter Battery systems. This critical system provides unprecedented reach, volume and precision to identify and track both friendly and hostile forces and interfaces with existing Navy systems to project land and sea power beyond the littorals.

#### CONCLUSION

On behalf of the marines and sailors who provide the Nation with its forward deployed crisis-response force, we thank you for your constant support in an era of competing challenges. We are proud of our reputation for frugality and we remain one of the best values for the defense dollar. These critical modernization investments, among many others, will ensure our success not if, but when future conflict occurs. Fiscal uncertainty has threatened both our capacity and capabilities, forcing us to sacrifice our long-term operating and training health for near-term readiness. Recognizing these fiscal challenges, we remain committed to fielding the most ready Marine Corps the Nation can afford.

The priorities reflected in the fiscal year 2015 budget are the modernization efforts that we must have to remain an affordable insurance policy for the American people. These efforts will allow the Marine Corps to remain a highly efficient and effective hedge against global and regional tensions that cause instability. As always, we will continue to provide our Nation's leaders with the time and decision space they need by responding to today's crisis, with today's forces ... TODAY.

Senator REED. Thank you very much. All the statements will be made part of the record.

General Glueck, please.

#### **STATEMENT OF LT. GEN. KENNETH J. GLUECK, JR., USMC, DEPUTY COMMANDANT, COMBAT DEVELOPMENT AND INTE- GRATION/COMMANDING GENERAL, MARINE CORPS COMBAT DEVELOPMENT COMMAND, U.S. MARINE CORPS**

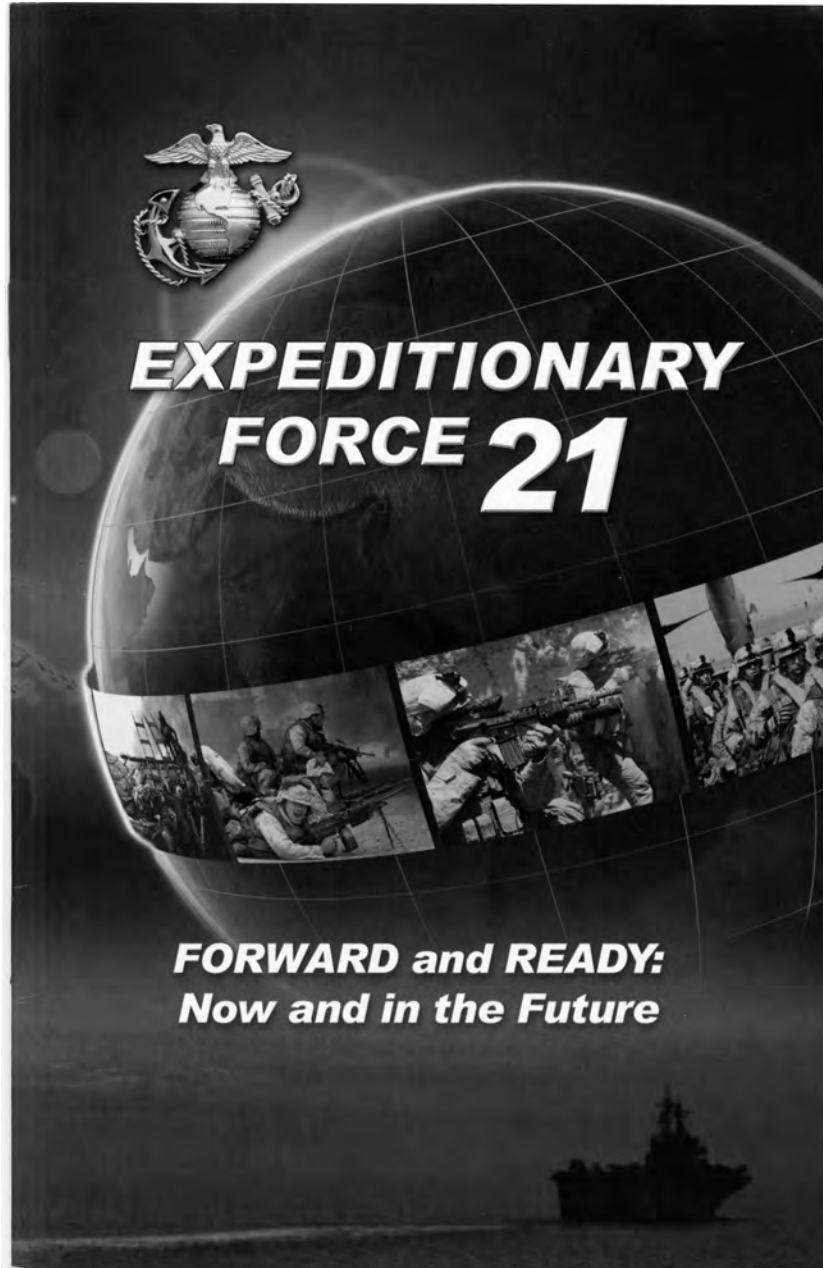
General GLUECK. Chairman Reed, Ranking Member McCain: Thank you for the opportunity to testify before you today. The Marine Corps' ability to serve as our Nation's premier crisis response force is due to a large part to this subcommittee's strong support. On behalf of all marines, I say "thank you."

A forward-deployed Marine Corps provides our combatant commanders a universal tool they can immediately employ. This force can serve as a leading edge of a larger joint force or deploy and sustain itself even in the most austere of environments. This ability to rapidly respond to developing crisis not only ensures the combatant commander has the right force in the right place at the right time, but also provides our national leaders valuable decision space.

Flexible and scaleable by organizational design and instinctively adaptive by culture, the Marine Corps is guided by our expeditionary ethos and bias for action. These characteristics are the hallmark of our Marine Corps' capstone concept, Expeditionary Force 21. We have given you a small pamphlet there that highlights some of the information that's in that concept.

[The information referred to follows:]





## ***Expeditionary Force 21 Attributes***



### ***Expeditionary Force In "Readiness"***

- 1/3 of operating forces deployed forward for deterrence and proximity to crises
- Self-sustaining under austere conditions



### ***Middleweight Force***

- Light enough for rapid response
- Heavy enough to prevail in the littorals



### ***Modern Force***

- Preserves quantitative edge over opponents
- Exploits innovative concepts and approaches



### ***Integrated Combined Arms Force***

- Applies all aspects of joint combat power
- Extends power of naval forces



### ***Integrated Naval Force***

- Command and control exploits the sea as maneuver space
- Leverages traditional and innovative operating concepts



### ***Force Biased for Action***

- Poised for rapid crisis response – no tiered readiness
- Readily Deployable-Employable-Sustainable forces



### ***Leading Edge of Joint Force***

- Regionally oriented MEFs and MEBs
- Small fly-in command element capable of transitioning to a joint warfighting headquarters



### ***Forcible Entry In Depth***

- Scalable to crisis, contingency or forcible entry
- Capable of projecting two MEBs from the sea
- Seizes and holds for follow-on joint forces

## FOREWORD

The past decade makes clear that responsiveness and versatility – the institutional trademarks of the Marine Corps – are always in demand. Even as we took the fight to the enemy in Iraq and Afghanistan, U.S. Marines were the “first responders” to tsunamis in the Indian Ocean and Japan, earthquakes in Pakistan and Haiti, emergency action in South Sudan, and the typhoon in the Philippines. As the Nation’s Expeditionary Force in Readiness, we are and will continue to be heavily engaged around the world.



While meeting current commitments and preserving readiness, the Marine Corps must reconfigure and refit to meet coming challenges. The future evolving and complex security environment will only increase the demands on the Marine Corps. The law requires and our heritage demands that we maintain a force that is naval in character and capable of conducting amphibious operations. The Geographic Combatant Commanders need us to give them the three-fold advantages of forward presence: the recurring dividends of “soft power” applied with a richer military dimension; the deterrent effect of immediate, credible and effective actions to thwart potential adversaries; and the expanded operational reach and tactical flexibility to defeat foes throughout the littorals. The American people will surely continue to expect – and the world will count on – Marines to be the leading edge of humanitarian relief and disaster recovery operations.

Expeditionary Force 21 is our vision for designing and developing the force that will continue to fulfill these responsibilities. But it is more than a vision – it is also an actionable plan and a disciplined process to shape and guide our capability and capacity decisions while respecting our country’s very real need to maintain budgetary discipline. True to our expeditionary ethos, we will work with a clear-eyed view of what will be asked of us and seek only what we believe is necessary. Nimble by organizational design and adaptive by culture, we will rely on open-mindedness and creativity and make the best of what we have. Through Expeditionary Force 21 we will chart a course over the next 10 years to field a Marine Corps that will be: ***the right force in the right place at the right time.***

Semper Paratus,

A stylized, handwritten signature of James E. Amos in black ink. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James E. Amos  
General, U.S. Marine Corps  
Commandant of the Marine Corps

### Expeditionary Force 21: Shaping the Future Marine Corps

This Marine Corps Capstone Concept is our vision for the next 10 years and our plan for developing the force to meet the threats and challenges posed by the changing operational environment. Expeditionary Force 21 builds on the conceptual and doctrinal foundation of Operational Maneuver From The Sea, Ship-To-Objective Maneuver, Seabasing and Marine Corps Doctrinal Publication 1-0 Operations. The purpose is to combine the value we provide today with the promise of what we can achieve tomorrow. The goal is a Marine Corps that is:



#### Optimized to be expeditionary...

- ✓ Ready to deploy immediately and reinforce quickly
- ✓ Comfortable in the chaos and uncertainty of crisis
- ✓ Able to adapt rapidly to changing conditions
- ✓ Operates effectively in any clime and place
- ✓ Exploits the advantages of being fast, austere and lethal

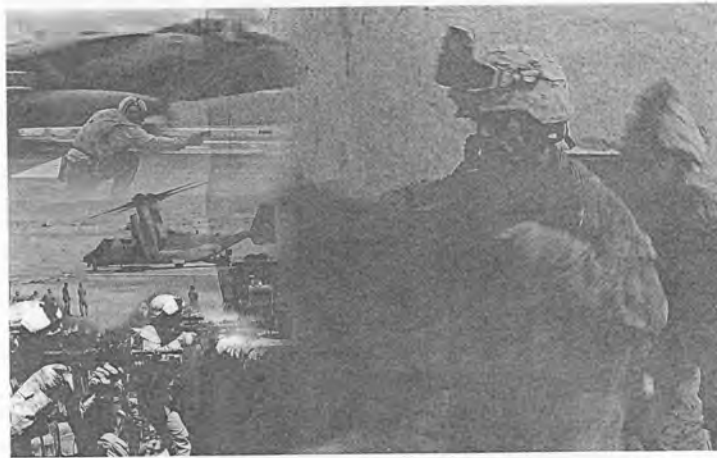
*... to respond to crises*

Expeditionary Force 21 codifies the essence of our expeditionary ethos: fast, austere, and lethal. It envisions a force that can achieve success in those missions where action delayed is action denied. It recognizes the need for living, operating, sustaining and maintaining people and equipment in spartan conditions where large support bases are unacceptable or infeasible. It promotes the economical employment of forces of almost any size and configuration with capabilities appropriately matched to the mission. It acknowledges the value of respecting and protecting people caught in the middle of a disaster or conflict, stepping lightly in all areas of support to minimize potential adverse cultural and political impact.

To Marines, "being expeditionary" is a long-standing commitment to speed of action. Adaptability on the go has been deliberately cultivated by Marine leaders for generations and will be the linchpin of our efforts to meet the coming challenges. Our expeditionary mindset will influence every aspect of our capability development and capacity decisions.



**Expeditionary Force 21 is not a plan in search of a blank check to "reinvent" the Marine Corps.** It is a vision to meet the increasing demand for the responsiveness and versatility that are our operational trademarks. Expeditionary Force 21 exploits the Marine Corps' signature ability to move rapidly, operate immediately, adapt to changing conditions and succeed in austere environments. This expeditionary mindset will influence every aspect of our capability development and capacity decisions. Expeditionary Force 21 will not change what Marines do; **but how we do it.**

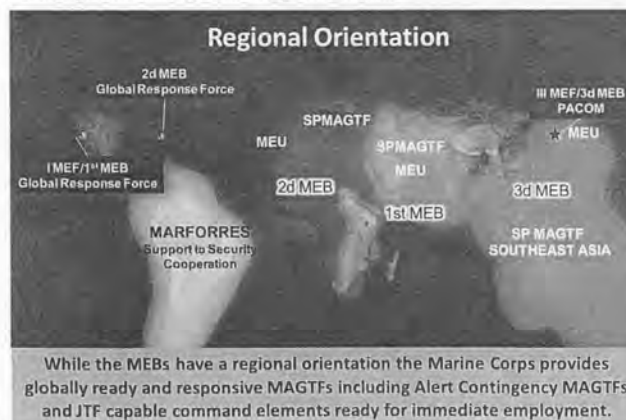


### **Expeditionary Force 21** **will produce a Marine Corps that ...**

- ✓ Sustains an increased and enduring presence around the globe
- ✓ Establishes MEBs with a specific geographic orientation
- ✓ Employs tailored regionally oriented forces that can rapidly respond to emergencies and escalating crises
- ✓ Rapidly deploy tailored command and control packages – fully joint capable
- ✓ Operates as part of a more integrated naval force to better fight and win complex conflicts throughout the littorals

**Expeditionary Force 21 is an aspirational, yet measured, vision** of naval expeditionary capabilities that we are exploiting today and enhancing for tomorrow. We can bring about needed change by being open-minded to new ideas and carrying them out by simple force of decision and diligence in execution. Other changes pose more complex challenges that can only be overcome through advances in science and technology. In those cases, our capability developers will be exacting in their comparisons of alternatives to identify and pursue the most cost-effective combination of solutions. We are currently working across four lines of effort:

**1. Refining Our Organization.** We organize into Marine Air Ground Task Forces (MAGTFs) for employment. Each MAGTF includes command, aviation, ground and logistics elements. The largest MAGTF is the Marine Expeditionary Force (MEFs). We have two MEFs able to exercise command and control of a joint task force. They remain our focal point for sustained warfighting operations. Expeditionary Force 21 focuses on three Marine Expeditionary Brigades (MEBs) capable across a range of operations from security cooperation to disaster response to forcible entry. The MEBs will also be able to command or integrate with joint task forces. We also deploy Marine Expeditionary Units (MEUs) into key regions for security cooperation and crisis response. Additionally, we employ special purpose or crisis response MAGTFs to meet specific needs such as persistent partner building or embassy reinforcement.



**2. Adjusting Our Posture.** We will maintain one-third of our operating forces forward and flexibly distribute them over a wider area to deter adversaries and effectively respond to emergencies and crises. We are orienting our forces to specific regions and positioning them to conduct sustained security cooperation activities. We will continue to sustain alert contingency forces that allow us to rapidly scale for action.

**3. Increased Naval Integration.** We are exercising the concept of forward "compositing" – forming up our reinforcing forces at or near the scene of a crisis. We remain dedicated to exploring holistic concepts of operation for launching assaults from a combination of amphibious ships reinforced by seabase platforms. We will strengthen our partnership with the Navy by integrating our operational staffs and institutionalizing our maturing concepts of employment.



**4. Enhancing Littoral Maneuver.** Expeditionary Force 21 envisions an assault mobility portfolio that permits us to execute future amphibious operations at the times and places of our choosing. To complement the operational reach of our vertical connectors (helicopters and tilt-rotors), we are exploring a new generation of surface connectors (boats, self-propelled amphibious vehicles, and landing craft) that enables us to maneuver through the littorals to positions of advantage in contested environments, employ dispersed forces, and exploit entry points of opportunity to project on-shore the full combined arms power of the MAGTF.



As stated in the Joint Operational Access Concept, the U.S., as a global power with global interests, has an enduring requirement to project power and influence. The joint force will meet this requirement and its associated challenges through increased cross-domain synergy. The Marine Corps intends to contribute to this synergy as a forward and responsive naval force. The next 10 years promise to be a new and challenging venture into the uncertain as we Marines reorganize, refit, redefine our operational capabilities, and strengthen our naval roots. Some goals within Expeditionary Force 21 will be easily met; others we must strive hard to achieve. Given the fiscal climate, we need to review capability development to minimize duplication and uncoordinated efforts. It is essential that we fully integrate naval capabilities and scrutinize everything from concept and doctrine to material requirements and solutions.

The objective is to ensure a forward and ready force postured for immediate crisis response and offers the ability to composite with forward forces to provide additional capability as needed to satisfy Geographic Combatant Commander requirements. It is critical that we have the ability to prosecute combat operations throughout the littorals (land-sea-air) as an integrated naval force. By leveraging naval capabilities, developing the techniques for rapidly deploying and integrating forces and staffs, and developing required future capabilities, the Navy/ Marine Corps team will be well positioned to provide the Geographic Combatant Commanders with ready forces in readiness to respond to crises.





### Expeditionary Force 21 in Summary

Expeditionary Force 21 expands on our legacy of crisis response and expeditionary readiness to meet tomorrow's uncertain challenges. Our goals are designed to build the right force in the right place at the right time, today and in the next 10 years. While some capabilities may require new equipment to achieve our goals; we must remain committed to working within fiscal and force structure limits. Each adjustment to capability must have an eye toward improving our ability to **deploy, employ, and sustain** as an expeditionary force. Through Expeditionary Force 21 we will focus on crisis response; increase our emphasis on missions ranging from theater security cooperation through forcible entry; enhance our ability to operate from the sea and take advantage of all platforms and means; and as a result, provide the **right force in the right place at the right time**.

#### Tailored to meet the needs of the Geographic Combatant Commander:

- ✓ Persistent forward presence for deterrence and action
- ✓ Regionally focused units that are integral parts of OPLANS and CONPLANS
- ✓ Forward-deployed forces that know the ground, the people, and the problems
- ✓ Provide joint force enablers to include a joint capable headquarters
- ✓ A cohesive Navy-Marine Corps team prepared to seize the initiative



## Integrated Naval Capabilities

### TAKE

Offers selective access and offload of unitized supplies for prepositioning MEB and other MAGTFs operating in the seaboard or ashore.

### LMSR

Military Sealift Command's (MSC) Large, Medium Speed, Roll-On/Roll-Off ship (LMSR) program significantly expands the nation's sealift capability as a prime mover of military equipment. The ships carry vehicles and equipment to support humanitarian missions, as well as combat missions.

### Mobile Landing Platform

Leverages float-on/ float-off technology and has raised vehicle platform, sideport ramp, mooring fenders and LCAC lanes. Utility of "Interoperable Pier in the Ocean" spans the Range of Military Operations.

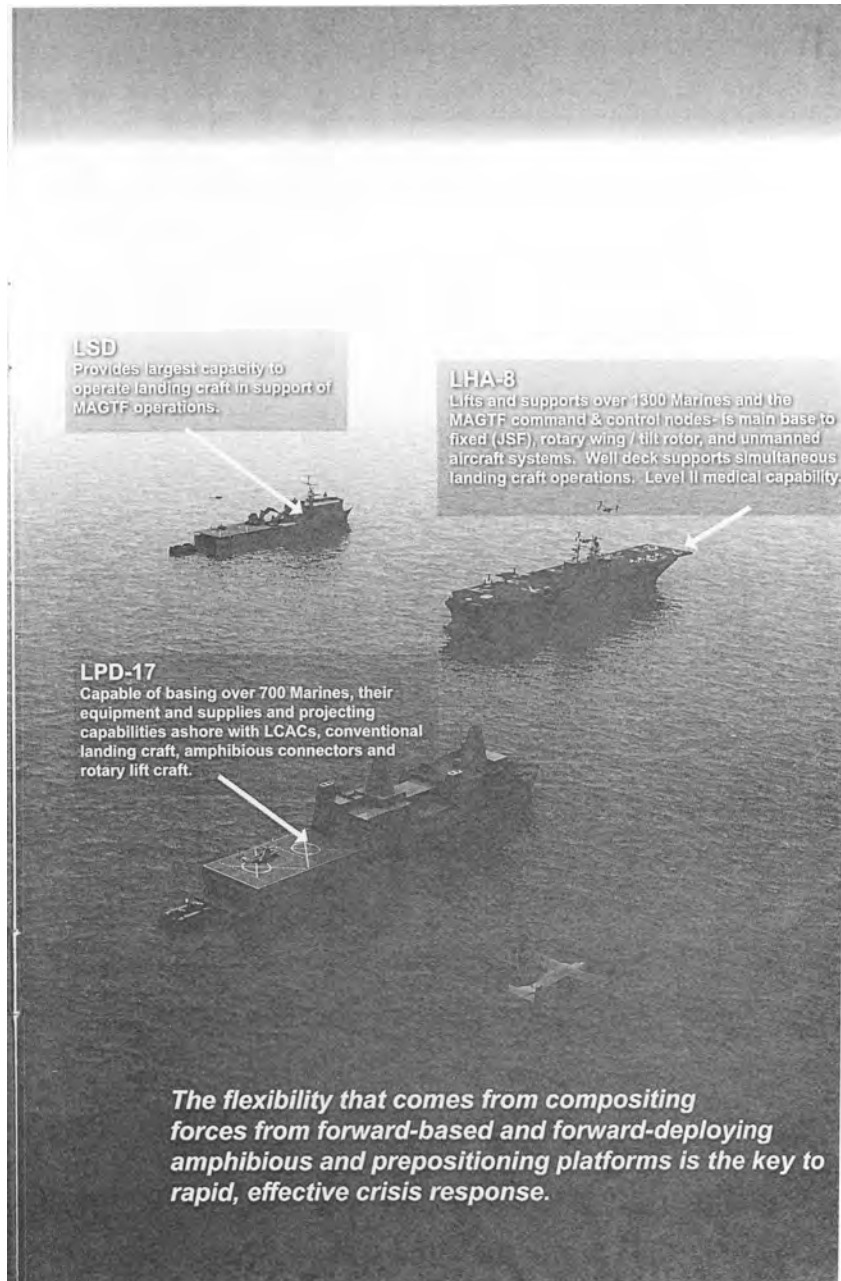
### JHSV

Provides high speed transportation for over 300 Marines and 20,000 sq ft of MAGTF equipment.

### Ship to Shore Connector (SSC)

Provides modernized landing craft over-the-beach capability.





*"We are, by our nature, 'expeditionary.' This means several things. It means a high state of readiness; we can go at a moment's notice. It means our organization, our equipment, our structure are designed to allow us to deploy very efficiently...It's a mind-set, too, about being ready to go, about being ready to be deployed, and about flexibility. We can easily and quickly move from fighting to humanitarian operations."*

**- General Tony Zinni, USMC**  
*Battle Ready, 2004*



General GLUECK. Expeditionary Force 21 blends our time-tested concepts of operational maneuver from the sea, ship-to-objective maneuver, sea-basing, with the strategic agility, operational reach, and tactical flexibility that our forward-stationed and deployed expeditionary units provide. Crucial to these capabilities and persistent presence are our amphibious warships. They are versatile, interoperable warfighting platforms capable of going into harm's way and serve as the cornerstone of America's ability to project power and respond to the full range of crises. With embarked marines, the amphibious ships are the Swiss army knife of the fleet, providing diverse capabilities unlike any other naval platform. They are critical to both our combatant commanders' theater engagement strategy and crisis response options, significantly contributing to both regional security and stability. From humanitarian assistance, to disaster relief, to forcible entry operations, it is the amphibious fleet that answers the call.

Innovative warfighting approaches and can-do leadership are hallmarks of the Marine Corps, but these cannot overcome the vulnerabilities created by our rapidly aging fleet of vehicles. Long-term shortfalls in modernization will have a detrimental impact on readiness and degrade our crisis response capability. Sustaining fleets of severely worn and legacy vehicles becomes inefficient and no longer cost effective.

Our ground vehicle modernization strategy is to sequentially modernize priority capabilities, reduce equipment inventory requirements wherever possible, and judiciously sustain remaining equipment. Our plans focus on achieving the right mix of assets while balancing capabilities and costs. With the smallest modernization budget in DOD, the Marine Corps continually seeks to leverage the investments of other Services to those areas which are most fiscally prudent and those that promise the most operationally effective payoffs.

The future security environment requires a robust capability to operate from the sea and to maneuver ashore to positions of advantage. The ACV provides us this capability and is our Marine Corps' number one ground modernization priority. It will be procured on a phased approach, thus complementing existing capabilities to maximize both the surface power projection and littoral maneuver. The benefits of this phased effort are aimed at producing an amphibious capability that deploys from greater distances and speeds, thus ensuring greater standoff distances for our forces.

Given continuing advancements in applicable technology, the Marine Corps believes that further investment in these technologies will lead to the envisioned high water speed capability.

Additionally, as part of the systems approach, the Navy/Marine Corps team will continue its investment in the next generation of future connectors. These connectors, with enhanced speed and range, both aviation and surface, will provide future expeditionary force commanders greater flexibility to operate in contested environments. The type of transformational technology that the MV-22 Osprey has already demonstrated needs to be brought to our surface connector fleet.

While the ACV remains the Marine Corps' number one priority, it will be part of a broader acquisition strategy aimed at providing

us a mixed fleet of balanced capabilities. This strategy involves retaining and recapitalizing portions of our AAV, Mine-Resistant Ambush Protected (MRAP) vehicle, and High Mobility Multipurpose Wheeled Vehicle (HMMWV) fleets. We will also address obsolescence issues in our Light Armored Vehicle fleet that are sorely needed to maintain the relevance of this unique platform.

In addition to preserving these legacy systems, we will remain firmly partnered with the United States Army in fielding the affordable Joint Light Tactical Vehicle (JLTV). The JLTV will greatly enhance reliability and survivability of our overburdened HMMWV platforms.

In addition to our critical investments in mobility, the fiscal year 2015 budget includes a request for the next generation radar, which will replace five of our legacy systems. The ground-air task-oriented radar is a multimode, ground-based, expeditionary radar that provides unprecedented reach, volume, and precision to identify and track both friendly and hostile forces and interfaces with existing naval systems to project land and sea power beyond the littorals.

Clearly, there are challenges in operating in today's new normal security environment, as well as challenges of constrained and uncertain budgets. But rest assured that our forward-stationed and deployed marines are poised to remain our Nation's premier expeditionary response force in readiness. Modernization priorities reflected in the fiscal year 2015 budget are paramount to maintaining future combat readiness and these investments will ensure that our Marine Corps remains most ready when the Nation is least ready.

In partnership with the Navy, the Marine Corps looks forward to working with you to address the issues. Thank you for the opportunity to be here and I look forward to answering your questions.

Senator REED. Thank you very much, General Paxton and General Glueck.

We've been joined by Senator Kaine. Thank you.

We'll do 6 minutes and as many rounds as we have time before the vote or after.

Let me begin with a question that we've raised. You're in many respects talking about long-term system development, but you're going to run into, by at least 2016, legal requirements of sequestration. So how are you managing that in terms of risk, in terms of program development, General Paxton and General Glueck?

General PAXTON. Thank you, Senator Reed. Chairman, within each dollar that the Marine Corps has, unfortunately we're only spending about 8 cents of the dollar on modernization. We're spending about 63 cents on people, about 27 percent on our operations and maintenance, about 8 cents on modernization, and 2 percent on sustainment and restoration.

So, these are hard choices that we've had to make as we look at not only the current size and capability of the Marine Corps, but what we anticipate that future Marine Corps will be. We had done a rather exhaustive study to try and keep a balanced air, ground, logistics Marine Corps that we can future deploy, and the optimal strength of the Marine Corps remains 186,800, sir. But the Marine

Corps that we are bracing for under sequestration is 175,000. That's a Marine Corps that has at least moderate risk, sir, for our operation plan and warfighting capability.

What we are trying to do, sir, as we look at the size of the Marine Corps is to make sure that neither the national command authority nor Congress ever have to make that hard choice between do you want a well-manned force, a well-trained force, or a well-equipped force. We're trying to keep that balance, air, ground, logistics, but between manning, training, equipping, as we come down to 175,000.

That, in a nutshell, is the way we're looking at sequestration and the negative impacts. We talked earlier with Senator McCain, sir, and we had originally forecasted that we would see significant changes in readiness as of about this time this year before sequestration kicked in. The President's budget gave us some extra money. We had some returned unobligated money that we were able to put into readiness, and each of our extra dollars over the last year went into buying back near-term readiness. We have not seen the immediate effects of that downward spiral, but we still predict that within about the next 12 to 14 months, with each budget cycle, we will continue to erode.

Probably the most significant and initially, the most visible impact on us will be on our aircraft, because we will have aircraft that will be out of reporting. Squadrons that would normally have 12 aircraft, that may have 8 now, could easily go down to 6 and be 45 to 55 percent manned, because there will be a backlog of depot maintenance because of parts, maintenance, people, and money. Then consequently the pilots that are in the squadron will have more pilots, fewer aircraft, and we'll see that downward spiral.

If that answers your question, sir, that's how we're looking at the size of the Marine Corps and the immediate impacts of sequestration.

Senator REED. Thank you.

General Glueck, do you have any comments?

General GLUECK. Sir, I agree with everything that General Paxton said. I'm in charge of ground modernization for the Marine Corps. In the last 2 years we've had to reduce that by about 25 percent. But we know that we did with a purpose. We're mortgaging some of our capability and development to maintain our current readiness. We're going to go ahead and move ahead on that. Some projects we had to cancel, other ones we've had to curtail.

But it's all in the name of maintaining our current readiness. I would say that as I was talking with Senator McCain, our marines that are forward-stationed and forward-deployed like we have today in Ssangyong up in Korea do not feel the impact of this. As far as they know, it's business as usual. It's the forces that are left behind that are feeling the major impact.

Thank you.

Senator REED. Thank you, General.

We mentioned the fact that you're beginning to exercise more, which is a very, I think, positive development. You're just, as you mentioned, General, about to complete the exercise in Korea. Part of these exercises, you get the results sometimes based upon the

assumptions you make. In the very few minutes that I have remaining, in these exercises, are you assuming air superiority, close access to the beach, and uninterrupted communications, so that electronic systems like Global Positioning Systems work constantly? Because there seems to be capabilities developing worldwide where some of these things that we took for granted 10 years ago might not be the operational environment that you are faced with.

General PAXTON. Thank you, Senator. We never want to assume that. I think invariably when we do exercises, you always posit the worst case scenario. In honesty, because we have been doing so much counterinsurgency work in Iraq and Afghanistan, and because we have a deficit in the training level, both nationally, as well as bilaterally and internationally, some of these exercises we have put that in as an example we'll do periodically. You'll go into Emission Control, you'll go into No Communication plans, you will go into a restricted environment of some sort.

But in order to regenerate the capacity and the capability, amphibious and expeditionary, that we haven't exercised for a while, the focus upfront, in all candor, sir, is to get back in to do those nuts and bolts things that we've been away from for 12 years. But we fully realize that both operationally, exercise, and modernization, we have to look at an environment where we'll be denied access, denied communications, things like that.

Senator REED. So, at this point, we're getting back into the amphibious game, if you will, the basics, getting off the ship, getting on the beach, assuming that you don't have further complicating factors. But your long-term exercise planning recognizes that these emerging threats are there?

General PAXTON. Absolutely, sir, absolutely.

Senator REED. Senator McCain.

Senator MCCAIN. I thank the witnesses.

General Paxton, you have some relief for 2014 and 2015, but without further change, sequestration kicks in again, right? One, how does that affect your planning? Two, what effect would it have if sequestration kicked in again in 2016?

General PAXTON. Thank you, Senator. We fully anticipate the worst case scenario, that in 2016 sequestration will kick in again. As I said earlier, sir, that's why we're planning on a 175,000-man Marine Corps as opposed to 186,800. We expect that we will see aircraft that go out of cycle reporting. We expect we'll have a maintenance backlog.

The net impact, Senator, will be that we will have our units ready to deploy and the next ones on the bench, but then the ones behind that will not be ready, sir. That'll be a decreasing spiral, in that the equipment won't be ready because it won't come out of maintenance and depots, the training won't be done, whether it's the ground side or the air side, and we'll pay for it in the tyranny of time and the tyranny of distance, sir. We won't be able to get, in the case of a major theater war plan, the two that we look at, the forces will not arrive as fast and they won't be as trained when they get there, and it could result in more casualties and things like that, Senator.



Senator MCCAIN. Mr. Chairman, it's an issue for the full committee, but maybe we ought to get an assessment from the Joint Chiefs of Staff exactly of what the impact of the renewal of the sequestration would have on our military. I think that it would be devastating, obviously.

General Glueck, the Government Accountability Office (GAO) recently identified deficiencies with software development in the F-35 that they say could stress its cost, schedule, and performance. Have you taken a look at that GAO report?

General GLUECK. Senator, no, I have not read that GAO report. I know General Schmidle, who's our Deputy Commandant for Aviation, is very familiar with that report.

Senator MCCAIN. I'd like you to take a look at it and maybe give us an answer in writing, because the GAO has been consistently correct on the problems with the F-35. They have not been wrong a single time. Unfortunately, the military, DOD, has been wrong every time, as we've watched the cost skyrocket. We still don't have the initial operational capability achieved.

Right now, what are your plans as to when we reach the initial operational capability for the F-35?

General GLUECK. Senator, that's when the conditions are going to be met. If the software is not developed to meet the requirement, then we will not declare Initial Operating Capability (IOC).

Senator MCCAIN. What are your plans now for it to be operationally capable?

General GLUECK. Sir, I'd have to take that for the record and discuss that with General Schmidle, our Departure Control System-Aviation.

[The information referred to follows:]

The F-35B is on track to Initial Operating Capability (IOC) in July 2015 with Block 2B software. The Marine Corps is working very closely with the Joint Strike Fighter Program Office to ensure we meet the planned IOC timeline. The aircraft has demonstrated its warfighting capabilities in developmental tests to include successful preplanned delivery of Joint Direct Attack Munitions, successful GBU-12 delivery using the F-35B's onboard electro-optical targeting system laser, and successful Advanced Medium-Range Air-to-Air Missile launch and guide demonstrations. At IOC the aircraft will have the capability to execute Close Air Support, limited Offensive and Defensive Counter Air, Air Interdiction, Assault Support Escort, Armed Reconnaissance, and limited Suppression of Enemy Air Defense missions.

Senator MCCAIN. Alright. Look, the next time you come before this subcommittee I'd like you to have some answers, particularly on the major and most cost-consuming program that we have, and that's the F-35. So, I guess I have to ask: do you think the software challenges could impact the F-35's ability to be fully combat ready?

General GLUECK. I think that any software development is development, and it moves in stages, sir. If you don't have the correct development at the very beginning, then it would have impact in the long term.

Senator MCCAIN. Is the F-35 being delivered now on time and on schedule?

General PAXTON. Senator, if I might, the models that we have are being delivered on time and on schedule. The software is tentatively behind schedule. The IOC is forecasted for July 2015. We have every expectation that that could be delayed by several

months, sir. It will continue to be conditions-based. We won't declare IOC until we work through these with the systems provider, sir.

Senator MCCAIN. Isn't one of the many lessons here, fly-before-you-buy?

General PAXTON. Absolutely, sir.

Senator MCCAIN. The ACV program, you have a request, which is pretty modest, of \$105 million. It follows the failed EFV program which was terminated in 2011. What is the time schedule that we could anticipate for the ACV? As we know, the present capabilities are extremely old, 40-year-old AAV.

General PAXTON. Senator, as the subcommittee and you are well aware, we have had challenges fielding what used to be the EFV in the program we killed. It's a three-part—we move from the AAV, which we have now, sir, 40-years-old, 50-year-old technology. We tried to move to the Advanced Amphibious Assault Vehicle (AAAV) and the issue then was to see how much high water speed we could get, if we could get the vehicle up on plane; moved it to the EFV, and then that did not bear fruit, sir.

We knew two things here. Number one is we had to actually triage the way we're going ahead—

Senator MCCAIN. I guess my question is: are we looking at 10 years, are we looking at 5 years, are we looking at—what kind of schedule would we have an adequate replacement for this 40-year-old AAV?

General PAXTON. Sir, fiscal year 2022 was the target window that we were trying to get, where we knew we had to do a mix of upgrading the AAV, getting an interim tentative replacement vehicle, and then trying to see where we could be, knowing we would probably only have one more chance to get this right if we could get a high water speed vehicle. It would start in fiscal year 2019 and we look to field something in 2022. We believe now that we can do all three of those pieces, sir, and I'll give it to General Glueck—

Senator MCCAIN. So it's about 7 years?

General PAXTON. Seven years, yes, sir.

Senator MCCAIN. I thank you, Mr. Chairman.

Senator REED. Thank you, Senator McCain.

Senator Kaine.

Senator Kaine. Thank you, Mr. Chairman, and thanks to our witnesses today. I echo Senator McCain's statements about sequester in 2016 and beyond. It was a good thing that we did to provide some sequester relief in 2014 and 2015, and I'm just struck every time I think about this that the DOD through the President's budget has come in and asked, not for the elimination of sequestration, but you've basically asked for sequester relief that over the course of the sequester would suggest that you would absorb about half the sequester cuts, actually a little more than half the sequester cuts, and seek relief from the remainder. I think that's a very reasonable request and look forward to working with my subcommittee members on that.

General Paxton, I want to ask you a couple of personnel questions. One, talk a little bit about the integration of women into the Military Occupational Specialties (MOS) across the Marine Corps,

as the decision was announced by Secretary Hagel about a year ago that all branches would look at gender-neutral criteria for the MOSs. If you could just talk about the progress of that, I'd appreciate it.

General PAXTON. Thank you, Senator Kaine. It was a mix of both statutory and legal requirements, as well as policy requirements. It was actually Secretary Panetta in January who started it, sir.

We have vowed within the building and to Congress that we will be deliberate, measured, and responsible as we look at this. Right now, sir, the Marine Corps has about 335 MOSs. There are approximately 290-some of them to which, other than passing the physical fitness test, the combat fitness test, there are no additional physical performance standards required with those MOSs. There are about 30 for which there are unique physical requirements.

So what we have obligated to ourselves, to Congress, to the American public, is to study those MOSs and to see what are those physical requirements. In the past, we have had the latitude, the luxury, in an all-conscripted force, as opposed to an All-Volunteer Force, and things like that, not to focus on.

We have, indeed, hard and fixed training requirements for all those MOSs. But we're going to open up the books and look at all those requirements individually and collectively. We have made, to your point, sir, some initial occupational fields where we believe there were no indications of additional significant requirements, and we made what is called an "exception to policy" and we took a closed unit which theretofore had not had women assigned and we opened it up. First, we assigned junior company-grade officers and senior staff noncommissioned officers to make sure that the performance was there, the culture was there, before we looked to move other marines who happened to be women in at the private first class level.

We're working through that first phase of exception to policy. The next step, as the Commandant has articulated, is we're going to stand up a ground combat element task force, and we're actually going to get in and study not only individual standards, but collective and unit standards, and we're going to try and study them in a terrain and in an environment where that unit will be tested. That will continue the 22-month period we had to do this deliberate, measured, responsible look at what the actual requirements are in the occupational fields before we make either an exception to policy or an exception to assignment, sir.

Senator KAINE. Thank you, General Paxton. I've been asking that question at all the posture hearings and exploring it, and it's been heartening to see the degree to which each of the branches are tackling this a year in. I'm glad to hear the way you describe it.

Another different personnel issue is, in the aftermath of the tragic attack on the embassy compound in Benghazi, one of the recommendations that the administration and Congress has agreed to is an augmentation of the Marine Security Guard (MSG) Program. I visited that training facility at Quantico, VA, and have been impressed. As I've traveled, largely on Senate Foreign Relations Com-

mittee travel, I've met a lot of the MSGs who are out there, all over the Middle East, especially.

I think there is a commitment to increase the size of that program by about an additional 900 to 1,000 MSGs over time. Could you talk a little bit about how that progress is going and whether sequester or other funding issues are potentially getting in your way as we try to accomplish that important objective?

General PAXTON. Thank you, Senator Kaine. Thanks to the hard work and support of this subcommittee and Senator McCain, in specific, we were able to get an increase of approximately 1,000 marines. The requirement is 881 marines and then we have what's called Transients, Transfers, Prisoners, and Patients, which is the training pipeline and the movement and folks who are not immediately assignable. But about 1,000 folks, and funded, sir.

So within that reduced force of 175,000 marines, which will be the new normal, that includes an increase to our MSG units. With the Department of State, we have identified 35 high-threat posts, which are additional embassies and consulates around the world that would need augmentation.

So we are now, number one, trying to cover down on those high-threat posts. Number two, we have what's called an MSG Augmentation Unit, which is trained, equipped, and ready in Quantico, VA. If you have a deliberate or an anticipated need, you can actually fly them out to augment the posts that are already there.

Then, as you saw, sir, in Libya and other places, we still have our Fleet Anti-Terrorism Support Teams who work with the Navy and the Marine Corps that can go in and augment on top of the MSGs, sir.

Senator KAINE. One last question, and this may be one for the record, because I was going to ask this for Secretary Stackley, even though he's not here. The Navy forces laydown program had a decrease at Little Creek Fort Story in Virginia Beach from 18 to 6 shifts between fiscal year 2013 and fiscal year 2020. I was going to ask the question about what the Marine Corps' plans are for Little Creek to maintain its hub, both for Navy and Marine Corps operations. That might have been more appropriately directed at him. If either of you could answer that, that would be great. If not, I'll just submit that for the record.

General PAXTON. Thank you, sir. I know we have our security cooperation group down there, and, of course, we're close to Little Creek, so we had some training there. We have moved some amphibious ships from Little Creek down to Mayport, FL, and changed the homeporting thing. In order to give the details and the integration with the Navy and the Marine Corps, I would like to take that for the record, sir, and get back with you on that.

Senator KAINE. Yes, absolutely. Thank you.

[The information referred to follows:]

The Marine Corps will continue to coordinate with the Navy to ensure that we maintain a focus on our expeditionary warfare capability. The Marine Corps units stationed aboard Joint Base Little Creek-Fort Story are an integral part of this team. Little Creek will continue to be the home of three training ships, as many as three Joint High Speed Vessels (one long-term), one salvage ship and several Mark VI patrol boats. The Navy is currently coordinating with the Coast Guard to permanently base two Medium Endurance Cutters at Little Creek in 2014 and 2015. Joint Expeditionary Base Little Creek-Fort Story currently has approximately

19,500 personnel (Active/Reserve military, Department of Defense (DOD) civilian, and contractor). As a result of Navy homeport changes through 2019 and with the addition of 2 Coast Guard cutters with a crew of 77, the base population (Active/Reserve military, DOD civilian and contractor) at Joint Expeditionary Base Little Creek-Fort Story is projected to be about 17,450 in 2019.

Senator KAINE. Thank you, Mr. Chairman.

Senator REED. Thank you, Senator Kaine.

Senator Wicker.

Senator WICKER. Thank you.

General Paxton, at a full committee hearing last week I entered into the record a March 25 letter from some 20 retired Marine Corps generals dealing with, among other things, amphibious ships.

Mr. Chairman, I ask that it be entered into the record of this subcommittee hearing.

Senator REED. Without objection.

[The information referred to follows:]

March 25, 2014

The Honorable Carl Levin  
Chairman  
Committee on Armed Services  
United States Senate  
Washington, DC 20510

The Honorable James Inhofe  
Ranking Minority Member  
Committee on Armed Services  
United States Senate  
Washington, DC 20510

Dear Chairman Levin and Ranking Member Inhofe:

We are writing to highlight concerns about two interrelated challenges that degrade our current national security capabilities and will have negative effects long into the 21<sup>st</sup> century.

For over a decade our national strategy has shifted towards forward engagement and immediate response when U.S. interests are threatened. These factors have placed increased demand on America's amphibious forces and resulted in longer at sea periods and concomitant wear on these critical warships. Reduced shipboard manning has degraded routine at sea maintenance. Increased intervals between Chief of Naval Operations maintenance availabilities; sharply reduced time in those availabilities; reductions in shore maintenance facility capabilities; and reductions in third party material readiness assessments have become the norm. As a result readiness of the amphibious force has suffered. This is exacerbated by the decline in the number of amphibious force warships because retirements of older vessels are exceeding the number of new deliveries. After 9-11 the actual requirement for 38 warships was fiscally constrained to 33 warships. At that time an assumption was made that improved maintenance concepts would yield higher force readiness and therefore the 33 warships would yield 30 ships immediately available or able to surge on short notice responding to urgent needs. The most recent Quadrennial Defense Review again validated the requirement for 38 amphibious warships. However, the assumed benefits of improved maintenance concepts have not materialized and current fiscal pressures are resulting in a decline from 33 to 28 warships. The latest Navy plans do not envision a force of 33 warships until at least the mid-2020s.

Experience over the past decade demonstrates that the demand for amphibious warships will not decrease. These "Swiss Army Knives" of the sea have proven to be much more than just troop transports. Their versatility and interoperability with our Allies have repeatedly caused them to serve as the cornerstone of America's visible forward presence, projecting metered power and response to crises ranging from non-combatant evacuations and humanitarian assistance to direct military intervention. Amphibious warships have conducted air and ship crew rescues; counter-piracy operations; embassy reinforcement; and support for partner nation naval forces. Continuous forward deployments in the Mediterranean Sea have been replaced by new demands in the littorals of Africa, East Asia, and Southeast Asia.

Navy funding has been inadequate to meet today's strategic requirements and to provide a modern Navy for the future. Maintenance and modernization costs have risen. The development costs for the SSBN(X) Ohio class ballistic missile submarine replacements will have significant impact on funds available for construction of other warships. Cost is an increasingly important consideration for the LX(R) class now planned to replace the LSD-41 Whidbey Island and LSD-49 Harpers Ferry class amphibious warships, which are nearing the end of their expected service lives. To reduce LX(R) costs consideration should be given to basing it on a proven warship design such as the LPD-17 San Antonio

class which is still under construction. The LPD-17 program was originally planned for 12 warships but was reduced to 11 vessels due to budget constraints. By using the proven LPD-17 design for a 12<sup>th</sup> warship we can leverage existing industry workforce and supplier relationships, thereby building a timely cost-effective bridge to LX(R) deliveries while also ensuring the health of our amphibious warship industrial base and labor force.

The challenges of diminished ship material readiness and the declining numbers of amphibious warships are interrelated and have cumulative effect on the nation's ability to support strategic imperatives. To address this we recommend that the Congress provide supplemental Overseas Contingency Operations funding to provide improved material readiness and reset for today's surface warships and funding for the proven LPD-17 design in the future LX(R) construction.

Very respectfully,

 James T. Conway General, USMC(ret)	 John J. Sheehan General, USMC(ret)	 James N. Mattis General, USMC(ret)	 Walter E. Boomer General, USMC(ret)
 Terrence R. Duke General, USMC(ret)	 Robert Magnus General, USMC(ret)	 William L. Nyland General, USMC(ret)	 Michael J. Williams General, USMC(ret)
 Raymond P. Ayres LtGen, USMC(ret)	 Robert R. Blackman LtGen, USMC(ret)	 Harold W. Blot LtGen, USMC(ret)	 Richard E. Carey LtGen, USMC(ret)
 Earl B. Hailston LtGen, USMC(ret)	 Edward Harlon, Jr. LtGen, USMC(ret)	 Jan C. Ruly LtGen, USMC(ret)	 Henry P. Osman LtGen, USMC(ret)
 Jeffrey W. Oster LtGen, USMC(ret)	 Charles H. Pitman LtGen, USMC(ret)	 Robert A. Tiebout LtGen, USMC(ret)	 Bernard E. Trainor LtGen, USMC(ret)

cc: The Honorable John F. "Jack" Reed  
The Honorable Bill Nelson  
The Honorable Claire C. McCaskill  
The Honorable Mark E. Udall  
The Honorable Kay R. Hagan  
The Honorable Joe Manchin  
The Honorable Jeanne Shaheen  
The Honorable Kirsten Gillibrand  
The Honorable Richard Blumenthal  
The Honorable Joe Donnelly  
The Honorable Mazie Hirono  
The Honorable Tim Kaine  
The Honorable Angus King, Jr.

The Honorable John McCain  
The Honorable Jeff Sessions  
The Honorable Saxby Chambliss  
The Honorable Roger Wicker  
The Honorable Kelly Ayotte  
The Honorable Debra Fischer  
The Honorable Lindsey Graham  
The Honorable David Vitter  
The Honorable Roy Blunt  
The Honorable Michael Lee  
The Honorable Ted Cruz

Senator WICKER. General Paxton, have you read this letter? I bet you have.

General PAXTON. I have, Senator.

Senator WICKER. Last week, in answer to questions, General James F. Amos, Commandant of the Marine Corps, and Admiral Jonathan W. Greenert, Chief of Naval Operations, testified they would need 50-plus amphibious ships to meet the needs of the combatant commanders, stating specifically the demand for steady-state operations all around the globe would indicate somewhere around the right number of 50-plus. Do you agree with that?

General PAXTON. I do, Senator. The steady-state demand signal is the most pressing demand signal for our amphibious fleet.

Senator WICKER. How are we doing on that need?

General PAXTON. Sir, when we do our amphibious shipbuilding, as I'm sure members of the subcommittee are aware, we looked at the war plans as the stressing environment, as opposed to the steady state, and according to the war plans to get the appropriate Marine Expeditionary Brigade amphibious lift there was a requirement for 38 amphibious ships. The long-term commitment has been to try and keep the amphibious fleet at 38.

Prior to September 11, in a fiscally constrained environment and given the industrial base, there was a tacit agreement between the Navy and the Marine Corps that we would have acceptable risk as long as the fleet stayed at 33. Right now, sir, if you look at the next 5 or 8 years, in the near-term the fleet is not going to be at 33.

Our concern on the Navy side, as it is on the Marine Corps side, is the monies that are available for maintenance. We have worked very closely and I certainly understand the significant maintenance challenge the Navy has with their depots and yards. But what we call the operational availability (A-sub-O) of the ships is not there. Even if we were to have 33 ships, the requirement for those aging platforms to get in the yard, to get upgraded, maintained, to keep them survivable at sea, to keep the communication systems up, we will not have the 33 at a minimum that we need.

We're in a period, the early part of a bathtub, sir, you get what we call the 11-11-11 mix of the three hull forms. We're not there, sir.

Senator WICKER. We're nowhere near the 50-plus that we would need for the steady state; is that correct?

General PAXTON. That's correct, sir.

Senator WICKER. What is your assessment of the risk to the Marine Corps' ability to execute its objectives, for example, in the Asia Pacific, if we do not provide you with the right number of ready, capable amphibious ships?

General PAXTON. Sir, I believe Admiral Locklear and General Scaparrotti have been here and testified that for their war plans there is at least moderate risk there, sir. In terms of closing within the time and the distance to meet the war plans, we would be challenged, sir.

Senator WICKER. With regard to the Landing Platform Dock-17 (LPD-17) program, this was originally planned for 12 warships, but was reduced to 11 vessels due to the budget. Do we need that 12th LPD to support your mission?



General PAXTON. Sir, operationally we could certainly use the LPD. We would never say no to another ship, particularly given, number one, the fact that we have—

Senator WICKER. Is it a frill? Is it an extra, a luxury?

General PAXTON. No, sir. It would get us closer to that, either the 38-ship count or the 54-ship count. The challenge, sir, as you well know, is the cost of the current ships. It's unsustainable at the \$2 billion plus that it's currently priced at, sir. Given the sequestration that we're all facing, how we would absorb that within the top line—and this would have to be above top line and a different type of prioritization to get that 12th ship.

It is a proven performer as a single ship deployer. It gives us the five fingerprints of lift that we need for aircraft, for surface, for people, and for cube and square. But how we would cost that and put it within the current program would be the challenge, Senator.

Senator WICKER. Let's assume that this subcommittee and this Congress takes care of the sequestration issue. Given that assumption, what would your request be to this subcommittee with regard to amphibious ships?

General PAXTON. Sir, the Marine Corps would always be in favor of looking to increase the amphibious fleet. Even if we had relief from sequestration, sir, we'd have to get with the Navy, because I know they have their own challenges with the *Ohio*-class submarine and the carriers, and how we balance the overall fleet capability is something that I know Secretary Mabus and the Navy has to look at, sir.

Senator WICKER. Okay. Let's assume it's unlikely that we can meet the defense budget—that it will be increased, as I hope. What tradeoffs will we have to make to strike a balance?

General PAXTON. Sir, I believe that the first tradeoff—having been down at Second Marine Expeditionary Force and Marine Forces Command in Norfolk, VA, and worked very closely with the Navy—the pressing thing for me as a Marine Corps commander would always be to work with our Navy counterpart to get the maintenance in the yards done, so that that A-sub-O, the availability of the ships in the inventory, is higher.

The Navy goal is to keep it at 90 percent. It is by advertisement around 70 percent. We would say it could even be a little bit lower than that. The current ships that we have in the inventory, if we were to have the 33 in the inventory, sir, the issue would be to get them into the yards to maintain so we could get them out on a short fuse to do operations.

I used the example for Senator Reed and Senator McCain earlier about the Super Typhoon that went through the Philippines. We were able to respond to that very quickly last November and December. Regrettably, the initial response was all by helicopter because all three of the ships that we needed were in the yards. The Navy, to their credit, got two out of the yards very quickly to go down there. The third one took another 2, 2½ weeks, and that's because of the requirement to get them back into the yards after sustained deployments to keep them maintained, Senator.

Senator WICKER. Thank you very much.

Thank you, Mr. Chairman.

Senator REED. Thank you, Senator Wicker.

Senator Blumenthal.

Senator BLUMENTHAL. Thank you, Mr. Chairman.

Thank you to the witnesses for being here today, and thank you for your service and dedication to our country. I think a number of us here who have sons who have served or are serving currently would join us in thanking you for your leadership, but also, I think, reflect to us that the main asset of the Marine Corps continues to be its men and women who serve.

We're here to talk about a lot of hardware and ships and planes, but I want to begin by asking whether you're satisfied that, with all the uncertainty about sequester, with all of the talk about drawdowns and other potentially discouraging news, that the men and women who are recruited, men and women who are enlisting to serve in the Marine Corps, are of the same quality as they have been in the past, in the recent past?

General PAXTON. Your caveat with, "recent past," sir, if you go past past, I think they continue to be of higher quality, of higher physical quality, higher moral quality, higher performance. We've had great marines for 239 years, sir, regardless of air, ground, logistics, male, female, officer, enlisted, regular, or Reserve.

Senator BLUMENTHAL. To put it more directly, you don't see any reduction either in quality or number of men and women who want to serve?

General PAXTON. No, sir. Our recruiting command is finding the best and the brightest out there. Truly, it's an All-Volunteer Force. They want to serve. All the indications from our recruit depots is that the caliber of the young man and young woman coming in is still high, and the operational commanders when they see them in the fleet early on, it's gone very well, sir.

Senator BLUMENTHAL. Let me shift to the F-35. You testified that the date of IOC may have to be postponed by a number of months as a result of the software issues. Certainly, I think many of us on the subcommittee share the views that have been expressed by Senator McCain about the difficulties in reaching combat readiness for this aircraft and our desire to make sure that we do everything possible to reduce the cost and increase the likelihood of on-time delivery.

My understanding from the Lockheed-Martin representatives who came to see me very recently, in fact, within the past few days, is that the software will be ready by July 2015. Are you saying something different today at this hearing?

General PAXTON. Sir, I'll start and then if General Glueck wants to chime in. July 15 is the planned IOC date. We had indications that that would be hard to meet. We have been assured by Lockheed-Martin that they were taking this on board and tackling it hard. I was trying to reiterate what General Glueck said to Senator McCain, that this is still going to be conditions-based, that we do want to fly it and maintain it and make sure it's operationally ready before we declare IOC or full operational capability; that we're going to work with the contractors collaboratively to make sure that the performance requirements and the thresholds are actually met before we do any declaration.

Senator BLUMENTHAL. You're not telling us there will be a further delay. You're expressing some caution about July 2015?

General PAXTON. Exactly, sir. That's still 16, 17 months out, so it's just cautionary at this time, sir.

Senator BLUMENTHAL. Those planes, the fifth generation fighters, are necessary to the Marine Corps' readiness and preparedness, are they not?

General PAXTON. Absolutely, sir. On this I will defer to General Glueck as both concept development and as an aviator. But it is a leap-ahead technology. It's not an aircraft or an air delivery platform. It is an integrated weapons system that is essential to the way we'll do business in a denied environment, where communications are a challenge, access is a challenge, and the time and distance separation to do our missions is a challenge. That's exactly what we need to make that leap ahead into the next generation, sir.

Senator BLUMENTHAL. General?

General GLUECK. Sir, I'd just reinforce what General Paxton said. It is a transformational capability. When I worked in the combat development field earlier around 2000 or so, that's when we were trying to figure out what transformational really meant. Transformational, what I came to find, was we have absolute leap-aheads, such as the V-22 and the JSF.

Every opportunity that I've had to visit the JSF and get in the cockpit of the simulator and what-not, it is an airborne integrator and it will replace three of our legacy aircraft, and it is a transformational capability.

Senator BLUMENTHAL. Thank you.

Let me ask about the Marine Corps heavy lift helicopter replacement. Looking to the shift of priorities to the Pacific, could you describe what role that helicopter will have in that role for the Marine Corps?

General GLUECK. Sir, our current CH-53 As and Es are becoming legacy. The newest one, the 53E, which is a three-engine aircraft, is coming up on 30-years-old. This is going to be a great modernization effort, and we need that heavy lift. It's going to have three times the lift capacity of the current E model.

I think when you look at combining that with the effects that we're going to have with the MV-22, when you look at our future concept of operational maneuver from the sea, they will be critical to moving the marines on the airborne connector side, to go from greater distances, to be able to move to positions in the shoreline.

Senator BLUMENTHAL. Thank you. Thank you very much for your very helpful testimony.

Thank you, Mr. Chairman.

Senator REED. Thank you, Senator.

Senator SESSIONS.

Senator SESSIONS. General Paxton, I'm worried where we are on the budget. We seem to be talking past ourselves on where our finances are. People talk about the sequester as causing more cuts, but that's not so, the way I look at the numbers. It's below the President's request, but it's not below current levels.

This year, 2015, the 050 account, the total is \$521 billion, and it goes to \$523 billion in fiscal year 2016, \$536 billion in fiscal year 2017, \$549 billion in fiscal year 2018, \$562 billion in fiscal year 2019, \$576 billion in fiscal year 2020, and \$590 billion in fiscal year

2021. That's the current law. That's the BCA. That's the caps we have on that number.

Are you aware of that?

General PAXTON. Sir, I'm aware of the distinction between the BCA and the Bipartisan Budget Act (BBA), yes, sir.

Senator SESSIONS. BBA filled the gap, because this year was a terrible year for DOD. It really would have been damaging to DOD. I wasn't comfortable the way they did it, but at least they helped this year.

You're getting by on this year. Fiscal year 2015 is going to be the same, and fiscal year 2016 has a little increase, and then you begin the \$13 billion a year increase in the out-years.

How is that further cuts?

General PAXTON. As I said earlier, sir, immediately prior to your arrival, we are planning on a worst case scenario. We are planning on the BCA levels. What we do is to buy back the readiness that is missing, sir. We continue to fund the people, continue to work on the drawdown in people and in equipment as we reset, and the additional monies that may come through something like the BBA, we will buy back both near-term and mid-term readiness, sir.

Senator SESSIONS. It's really important because the Marine Corps is such a critical part of our defense structure, and in a crisis, that's who we call. We're going to have to have you.

But let me just run these numbers because I'm confused about where we are. One of the problems we have is that the President and the Democratic Senate has said: We will not give another dime to DOD unless we increase spending, likewise, for the non-defense departments. That's one reason we're having a hard time finding you any extra money—the Commander in Chief. That's his position.

Looking at the budget request, looking for 184,000 marines this year, or is that fiscal year 2015, down from 190,000 marines in fiscal year 2014? You're at 190,000 marines in fiscal year 2014, you drop to 184,000 marines in fiscal year 2015. That's a noticeable drop. It's not a little bitty matter. That's the numbers I have here.

General PAXTON. Yes, sir.

Senator SESSIONS. Then it goes to 182,000 marines in fiscal year 2017, and then the numbers I have says that the Future Years Defense Program (FYDP) submitted with the President's budget has the Marine Corps reducing to 175,000 marines by the end of fiscal year 2019. That's based on the law, the BCA numbers which includes the sequester.

General PAXTON. That's correct, Senator. We believe by the end of the FYDP we'll be at 175,000 marines.

Senator SESSIONS. Have you analyzed—maybe you were asked this before I got here—but have you analyzed the impact of this? We know we upped the Marine Corps, we surged some for this sustained combat you've been involved in, really for a decade, more than a decade. Can you go to 175,000 marines and still be within the budget, still have some procurement, and be able to meet the responsibilities of the force?

General PAXTON. Senator, we did discuss this briefly a little tangentially prior to your getting here, sir. We have done fairly exhaustive studies about the size and shape of the Marine Corps, try-

ing to keep it ready and responsive as our Nation needs, most ready when the Nation is least ready, and to try and keep that balance between aviation, ground, and logistics.

The optimal Marine Corps would be 186,800, sir. Under BCA we believe that the only way we can keep it balanced and ready, and that the next plateau would be about 175,000 marines, sir. There is risk——

Senator SESSIONS. Where were you, what number, do you recall, before September 11?

General PAXTON. Sir, on September 10 we were about 185,000 marines, sir. We knew, thanks to Congress, congressional support, when we went to 202,000 marines, that enabled us to do what we needed to do in a counterinsurgency environment in Afghanistan and Iraq. We knew that that would be fiscally unsustainable and we'd have to come back down. So prior to sequestration, we started to look at how we reshape as we come down, sir.

Senator SESSIONS. Now, the Secretary smiled a little bit when I said you laid out these numbers. I know you have a responsibility and you lay out the worst-case scenario. It may not have to be quite so bad. I think he understood what I was saying, because he doesn't want to be pollyannaish about trying to meet these numbers. But I'm hopeful that that may not be so if you manage well. You may be able to get above 175,000 even at this level.

We were promised massive civilian furloughs that didn't occur. A few did, but not many, so I'm hopeful. We're going to have to get to the bottom of it. That's all I'm telling you. We're going to have to have honest reporting on this number and Congress can't just keep breaking the budget we agreed to. We just can't keep doing this every year. Doctors, they want to break the budget to have the doctors. Unemployment insurance, they want to do it for that. DOD wants to do it for this. Preschool education, they want to do it for that.

All of this—at some point we have to adhere to the numbers we have. Are you aware that interest on the debt was \$211 billion last year, \$233 billion, and it's going, according to the Congressional Budget Office, to \$880 billion 10 years from today? \$600 billion increase in annual interest payment, which is more than the defense budget. You just can't keep borrowing and spending. We have a serious financial problem. I'm just saying that to my colleagues, who aren't here to hear it.

Senator KING. I am, and I'm listening.

Senator SESSIONS. Good. Good for you. I know you managed your State well and dealt with the realities of it.

One more thing. Is my time up? Yes. I'll submit for the record a question about the Joint High Speed Vessel (JHSV). I believe if you can give me a yes or no: Do you think that has potential to play a larger role, General Glueck?

General GLUECK. Sir, the JHSV is going to be a force multiplier for us. I used to command the Third Marine Expeditionary Force out in Okinawa and we had a similar capability in the Western Pacific Express. That brought us the capability of carrying over 900 marines and you can carry 20 C-17 loads worth of equipment.

I see that the current fleet that we're developing today down at Austal—and I've had a chance to go down and walk the decks and

see the capability that exists today—it's going to be a gamechanger for us.

Senator SESSIONS. That's good to hear because it's relatively inexpensive. It's under \$300 million, whereas—\$193 million, less than \$200 million, and compared to \$2 billion ships—if it can be a force multiplier at that cost, I think it has maybe a role, an expanded role to play in the future.

General GLUECK. We look at it to be a critical connector for us. In today's environment, you have amphibious ships and you have maritime prepositioned ships, and they're going to come together at the sea base. A connector like the JHSV would be able to offload equipment and personnel and be able to change the load, and that could be our high-speed connector to get us to the shore.

Senator SESSIONS. I'm hearing good reports about its value. Thank you for that and I will submit a question for the record.

Senator King, Mr. Chairman, I turn it over to you.

Senator KING [presiding]. Thank you, sir.

Gentlemen, I want to apologize. If the Marine Corps was run on the same logistics and scheduling system as we do around here, you'd still be fighting the War of 1812. There's a vote on, a rather important one, so that's created this back and forth in the subcommittee.

General Paxton, I'm always interested in lessons learned and I know in your business you do after-action assessments. What have we learned from the EFV issue, cancellation, that we are using in the developing of the ACV? In other words, are we ahead of where we were? Can we avoid some of the mistakes that were made in the development of that earlier system? How does it look now for the timely and cost-effective development of the ACV?

General PAXTON. Thank you, Senator King. I'd like to assure you and fellow members of the subcommittee that we have indeed captured the lessons learned, both with the AAV and the EFV, to make sure that the mistakes that were made are not repeated.

I started to articulate this for the subcommittee earlier and I'll turn it over to General Glueck as the concept developer who is actually in charge of the program now. But we did a rather exhaustive 10-month study of, first off, the requirement, the ship-to-shore requirement that drove the actual procurement and the process; number two, the actual non-development, on-the-shelf capabilities that exist around the country; and then number three, is where the delta was for things that we thought we needed or wanted to have.

We took a look at what we called the Four Big Areas, which are: lethality, troop capacity, direct fire protection, and indirect fire protection. Then we tried to balance those requirements against affordability and against the novel game-changing concept of, can we get high water speed, which is what we were trying to do originally.

The existing AAV is, sir, 40-years-old for the vehicle and 50-years-old for the technology. We had about 64 different permutations and combinations of the costs and the risks and the capability. We did things like Monte Carlo analysis and we brought in folks from industry, best of industry, best of government, to take a look at this for the better part of 10 months, sir.

We have concluded that high water speed is capable, technologically capable. In order to get the things that we need for troop capacity, vehicle protection, and remote weapons systems, it will probably be unaffordable in the current—certainly in the current environment.

Senator KING. When we say “high water speed,” what are we talking about?

General PAXTON. Sir, right now the vehicles go 4- to 6-miles per hour (MPH). We’d like to get them up certainly into the teens, and if you could get 18 to 21 MPH where you could get them up on plane—the requirement issue, sir, is that in order to get ship-to-shore you have both a 12-hour tidal change period and then the roughly 12-hour period of darkness. Whether it’s a humanitarian assistance disaster relief or whether it’s a forcible entry operation, what we’re trying to do is build up that combat power ashore as quickly as we can within one of those tidal periods or within one period of darkness.

Senator KING. You determined that the high speed capability was inconsistent with the other values you were trying to achieve?

General PAXTON. Not inconsistent, sir, and certainly desirable. But unfortunately, when you put the triangle there it became unaffordable, again particularly in the sequestered environment.

What we have done, sir, is keep the overall requirement there, but then we tried to do what we call a triage, where we would take the AAV and see what kind of modernization and upgrades we could do with it, then we would take a look at non-development, off-the-shelf technology that indeed may not be what we call self-deployable but can actually swim and have better speeds than what we have now, at the same time keeping a hard look at what the future technologies would be.

I see General Glueck there, so he can work with you and tell you how we balanced the numbers on the time lines to try and keep this as an affordable program and fill in the gaps that we need operationally.

Senator KING. Where are we in the development stage now? When do we expect to see a product?

General GLUECK. Which product would we be talking about?

Senator KING. The ACV.

General GLUECK. The ACV. Right now there are four contractors that have current models that we’ve actually driven in. I took the Commandant out to the Nevada Test Facility out there. We rode in every combat vehicle we have within the inventory.

Senator KING. How do you test an amphibious vehicle in Nevada? [Laughter.]

General GLUECK. For their shore capabilities.

Senator KING. I’m just teasing. [Laughter.]

General GLUECK. The shore capability.

We drove in all four of these ACVs that’ll be probably in competition, that are production models. The ride and performance was far superior, because we actually had one of the old EFVs out there. When you rode in that, the tracked vehicle, it was like night and day, the difference.

Senator KING. If they have prototypes, that means once the decision is made, the time to delivery shouldn’t be that long.

General GLUECK. Yes, sir. We're looking for a streamlined delivery of the process that's out there, because we've already done a little bit of work on the requirements side earlier with the MPC program. Essentially our phase one of the program would be to buy that technology as it exists today.

We looked at if we can stay on track and with the current process, that we should be able to have an IOC about by 2020.

Senator KING. As you have developed this, I assume that part of the specification was improvised explosive device-resistant; is that the case?

General GLUECK. That's correct, sir.

Senator KING. Because that's going to be something we're going to deal with practically everywhere, I'm guessing.

General GLUECK. Yes, sir. The previous EFV was very limited in the force protection on that side because you had to give up weight, weight for speed on the surface of the water. It was not as well protected. It was less than 1X. The current fleet of vehicles that we're talking about, of the four that we rode, the least was 1X and then the other three were over 2X, up to 2.8X, as far as protection. They're far more protective. But they're also far more survivable to a blast.

Senator KING. Now I understand that this is the ACV, the vehicle that would be used on both land and on the water. But there is also a separate vehicle for connector. Where are we on that project?

General GLUECK. As you look at it, we have the AAV fleet today, which is about 1,062, and that was to be able to move 12 battalions worth of lift. The plan right now is that we will go ahead and do a survivability upgrade on about 392 of those vehicles. That will be able to give us four battalions worth of lift, be able to meet our Marine Corps brigade forcible entry requirement, and also meet the requirements for all our deploying MEUs that are going to be the crisis response forces.

That will be a bridge. At the same time, we will go ahead and develop the ACV phase one that we talked about there, that would be a production line variant, whoever wins the contract, that they would set up, and we would buy a limited number of about 200. That would be the vehicles, essentially, probably 90 percent of the vehicle that we've already seen today.

Then 1.2 of that program then would be to buy the rest of the vehicles to be able to give us the full additional six battalions worth of lift. So you would have the ability to lift 10 infantry battalions. Four of them would be in the AAVs that are going to be upgraded and then the rest would be in the ACVs.

Now for the future, what we wanted to do as phase two was to continue to do some research and development on the combat vehicle, the high water speed vehicle, to see if there's any breakthroughs, if we can come up with a new engine or if there's something else that they can do to give us that high water speed.

In lieu of that, we're also going to look at a research and development effort to focus on connectors, because we can get high water speed through the series of connectors. Currently, we have the Landing Craft Air Cushion and we have the Landing Craft Utility, but they're legacy systems. They're being upgraded, but they're



going to give us marginal increases in performance. What we're looking for is something more along the lines of the JHSV, for example, or another connector similar to that, that's going to be able to give us probably 25 to 35 knots over the water, to be able to move; take our ACVs; we can do an at-sea integration between the grey hulls and the JHSV, put those on there, and then they'd be able to actually launch those into the surf closer in to shore.

Senator KING. We've been talking for my whole series of questions about the traditional Marine Corps mission of amphibious assault. Yet, Afghanistan was a full-blown ground situation. What's your strategic thinking about what you need to be prepared for? Do you need to be prepared for both? Where do you see the Marine Corps demands of the future? Is it back to amphibious or are you going to have to also think about a 10-year ground war?

General GLUECK. I don't know if you know General Wilhelm, retired. He told me that it's like going back to the future almost, getting back to our amphibious roots, being our Nation's premier crisis response force. As we focus in our Expeditionary Force 21 concept, as we look at being that expeditionary force in readiness, we're focused on being that middleweight fighter. That means you can box up and you can box down. But to be that middleweight capability, to provide that immediate crisis response, so you have the right force to the right place at the right time. That doesn't mean that you can't box up in class and go ahead and conduct operations ashore alongside with our Army brethren.

Senator KING. General Paxton, any thoughts on that?

General PAXTON. No, sir. I agree with General Glueck. We have been since 1952, by congressional mandate, the Nation's crisis response force. We are tasked to be most ready when the Nation is least ready. Given the amount of space around the world that's in the littorals, that you have to have access from the sea, you need assured access, and you need access to the global commons, we do believe that we need to go back and be more amphibious and more expeditionary.

We've been proud and successful at what we've done for the last 12 years in Iraq and Afghanistan but we're trying to refocus on the capability that the Nation needs so that we can do assured access, power projection, and safeguard our way of life around the world, sir.

Senator KING. I'm going to turn it over to Senator Kaine in a minute. But I'm delighted that you're working on the ACV and that it's moving rapidly. Senator Inhofe, at most of our general hearings has a chart of time from concept to delivery, and it's getting longer all the time. 23 years is, I think, the average now in some of the forces. To the extent that can be shortened, I think that's to everybody's benefit.

It sounds like you think you'll be ready in 2020?

General PAXTON. Yes, sir. As General Glueck said earlier, what we have done is the concepts and the state of technology in wheeled vehicles have surpassed that of tracked vehicles over the last 12 years, so we've gone back to try and capitalize on that, so that this interim solution for the ACV will actually be non-developmental. It will be off-the-shelf technology that surpasses what we have in the AAV. That's a good use for the taxpayers' dollars, sir.

Senator KING. That's great. This isn't an admonition to you, but I'll share this to you because you can use it on your folks. When I was Governor of Maine people would come and say: "that'll take 2 years, or that'll take 3 years." I always reminded them that Eisenhower retook Europe in 9 months. I think that's a good standard for us.

Gentlemen, thank you very much.

Senator Kaine.

Senator KAINE. No, thank you.

Senator KING. Oh, you're all set? Okay.

The record is going to be held open until 5 p.m. on Thursday. There will be additional questions submitted for the record. If there are no other questions, the hearing is adjourned. Thank you very much, gentlemen.

[Whereupon, at 10:27 a.m., the subcommittee adjourned.]

[Questions for the record with answers supplied follow:]

#### QUESTIONS SUBMITTED BY SENATOR JACK REED

##### MARINE CORPS SUPPORT MODULES FOR LITTORAL COMBAT SHIPS

1. Senator REED. General Paxton, in the past, the Marine Corps has expressed interest in developing and fielding some module for the Littoral Combat Ship (LCS) that would support Marine Corps amphibious missions. Is there any update of any analysis or conceptualization of the attributes you would want to achieve in an LCS module for Marine Corps amphibious missions?

General PAXTON. There have been discussions about what we call a Marine Module for LCS and there are potential applications that would require further analysis. The attributes the Marine Corps would want to achieve in an LCS model are: a larger mission bay, a flight deck with increased load strength to support the CH-53, and the capability for at-sea offload. Neither the LCS-1 nor 2 have these attributes. The Marine Corps continues to explore LCS options.

2. Senator REED. General Glueck, has the Navy conducted any further work on an amphibious warfare mission module or other mission modules that might address other warfare areas?

General GLUECK. There have been discussions, but potential application would require further analysis. Marine Corps operational requirements were not taken into consideration during LCS development since it was primarily designed to support three Navy missions in the littorals: mine warfare, anti-submarine warfare, and surface warfare.

##### ARMORED VEHICLE MIX AND QUANTITIES

3. Senator REED. General Paxton and General Glueck, the Marine Corps argues that without a self-deploying Amphibious Combat Vehicle (ACV), a landing force cannot overcome an enemy defense of the shoreline. A landing force using the Landing Craft Air Cushion (LCAC) is only capable of an administrative off-load on the beach. However, armored vehicles like the Marine Personnel Carrier (MPC), tanks, artillery, light armored vehicles, and other combat support systems require a ship-to-shore connector like the LCAC to get there. Adding a new MPC system to the non-amphibious tactical vehicle mix increases demand on the existing LCAC fleet and has implications for the rapid buildup of combat power ashore. What is the Marine Corps' assessment of the capabilities and mix of its amphibious, combat, and tactical vehicles, and the ship-to-shore lift required to transport them to support operations ashore?

General PAXTON and General GLUECK. The Marine Corps' Ground Combat and Tactical Vehicle Strategy provides the basis for planning, programming, and budgeting to provide balanced maneuver and mobility capabilities to the Marine Corps' Operating Forces. We remain committed to the process and continually assess the requirements of the force as we refine the platforms that will be available. The Marine Corps' way ahead is to develop and procure Joint Light Tactical Vehicle (JLTV) in conjunction with Assault Amphibious Vehicle (AAV) modernization, refine AAV

upgrade and ACV Phase I acquisition objectives, and fund a modern armored amphibious wheeled vehicle as a complementary capability to an upgraded AAV. As ACV characteristics and capabilities are solidified, they will have to be integrated within our connector strategy. In the near-term, marines will transit from amphibious shipping and leverage assets such as the Mobile Landing Platform (MLP), large, medium-speed, roll-on/roll-off ships (LMSR), and T-AKE to integrate marines and equipment at sea. Marines will transit towards objectives ashore using self-deploying AAVs, the ACV paired with ship-to-shore surface connectors, and vertical connectors like the MV-22 and CH-53E/K they will transit towards the objectives ashore. Via connectors like the LCAC and its replacement the ship-to-shore connector (SSC), the Landing Craft Utility (LCU) and its replacement the Surface Connector (X), as well as intra-theater connectors like the Joint High Speed Vehicle (JHSV); the Marine Corps will transport combat power in the form of heavy combat equipment, large numbers of marines and sustainment across the shore. In the future, we expect forward and rapidly deploying forces will begin operations from increasing distances offshore. Vertical connectors will move a landing force rapidly from over the horizon to objectives hundreds of miles inland. Amphibious Warships and Maritime Sealift Command heavy lift assets will marry at the seabase and conduct at sea transfer. Using high speed connectors marines will rapidly close this distance from the seabase towards the objective. These connectors will conduct in-stream offload in the vicinity of the beach and the marines will debark ashore at a location of our choosing, exploiting the seams of the defense and continuing inland towards the objective.

4. Senator REED. General Paxton and General Glueck, how does the Marine Corps propose to manage this risk in deciding on the size, mix, and affordability of its amphibious and ground vehicle fleets?

General PAXTON and General GLUECK. We are managing risk by focusing on the most pressing priorities, by sequencing the procurement of those priorities and by pursuing mature, low risk technological solutions.

5. Senator REED. General Paxton and General Glueck, the Marine Corps emphasizes the tactical importance of coherent rifle squads moving and maneuvering as a single unit. This objective has driven the size requirements for amphibious vehicles—that is, the capacity to internally transport a complete rifle squad. Is the Marine Corps changing its views on keeping rifle squads together?

General PAXTON and General GLUECK. No. The previous design of the Expeditionary Fighting Vehicle was based on a requirement to carry a reinforced rifle squad (17 marines) from ship to inland objectives. This requirement achieved squad integrity while minimizing the number of vehicles required. Our objective remains the capability to carry a squad in a single vehicle; however, splitting the squad and reinforcements across two vehicles enables us to capitalize on non-developmental designs and we have determined through analysis that the tactical dispersion afforded a split squad while mounted in vehicles actually increases the survivability of that squad.

6. Senator REED. General Paxton and General Glueck, is splitting squads now considered operationally beneficial rather than a drawback to be avoided wherever possible?

General PAXTON and General GLUECK. Tactical dispersion is not a drawback and has never been viewed as detrimental. Tactical dispersion can increase survivability, lethality, and employment flexibility. Maintaining squad integrity, while mounted in vehicles, can simplify tactical employment, command, and control and can reduce the number of vehicles required; however, vehicles must still be planned for support elements that are normally employed with rifle squads.

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#### QUESTION SUBMITTED BY SENATOR TIM KAINE

##### JOINT BASE LITTLE CREEK-FORT STORY

7. Senator KAINE. General Paxton, the Navy's force laydown program included a decrease from 18 to 6 ships between fiscal year 2013 and fiscal year 2020. What is the plan for Little Creek to maintain its prominence as a hub for Navy and Marine Corps expeditionary warfare?

General PAXTON. The Marine Corps will continue to coordinate with the Navy to ensure that we maintain a focus on our expeditionary warfare capability. The Marine Corps units stationed aboard Joint Base Little Creek-Fort Story are an integral

part of this team. Little Creek will continue to be the home of three training ships, as many as three Joint High Speed Vessels (one long-term), one salvage ship, and several Mark VI patrol boats. The Navy is currently coordinating with the Coast Guard to permanently base two Medium Endurance Cutters at Little Creek in 2014 and 2015. Joint Expeditionary Base Little Creek-Fort Story currently has approximately 19,500 personnel (Active/Reserve military and Department of Defense (DOD) civilian and contractor). As a result of Navy homeport changes through 2019 and with the additional 2 Coast Guard cutters with a crew of 77, the base population (Active/Reserve military and DOD civilian and contractor) at Joint Expeditionary Base Little Creek-Fort Story is projected to be about 17,450 in 2019.

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QUESTIONS SUBMITTED BY SENATOR KELLY AYOTTE

FORGONE INVESTMENTS

8. Senator AYOTTE. General Paxton and General Glueck, in your prepared joint statement, you state that the “Marine Corps has forgone some investments to maintain near-term readiness.” What investments has the Marine Corps forgone to maintain near-term readiness?

General PAXTON and General GLUECK. With the smallest modernization budget in DOD, the Marine Corps continually seeks to leverage the investments of other Services, carefully meting out our modernization resources to those investment areas which are the most fiscally prudent and those which promise the most operationally effective payoffs. Innovative warfighting approaches and can-do leadership are hallmarks of the Marine Corps, but these cannot overcome the vulnerabilities created by our rapidly aging fleet of vehicles, systems, and aircraft. Long-term shortfalls in modernization will have a detrimental impact on readiness and, at some point, sustaining fleets of severely worn vehicles becomes inefficient and no longer cost-effective. This inefficiency reduces available modernization resources from an already small account, degrading our ability to effectively operate in today’s complex security environment.

9. Senator AYOTTE. General Paxton and General Glueck, the Navy’s force laydown program included a decrease from 18 to 6 ships. What is the readiness impact of not making those investments?

General PAXTON and General GLUECK. The Marine Corps will continue to coordinate with the Navy to ensure that we maintain a focus on our expeditionary warfare capability. The Marine Corps units stationed aboard Joint Base Little Creek-Fort Story are an integral part of this team. Little Creek will continue to be the home of three training ships, as many as three Joint High Speed Vessels (one long-term), one salvage ship, and several Mark VI patrol boats. The Navy is currently coordinating with the Coast Guard to permanently base two Medium Endurance Cutters at Little Creek in 2014 and 2015. Joint Expeditionary Base Little Creek-Fort Story currently has approximately 19,500 personnel (Active/Reserve military and DOD civilian and contractor). As a result of Navy homeport changes through 2019 and with the additional 2 Coast Guard cutters with a crew of 77, the base population (Active/Reserve military and DOD civilian and contractor) at Joint Expeditionary Base Little Creek-Fort Story is projected to be about 17,450 in 2019.

LESS READY, TEMPORARILY TIERED STATUS

10. Senator AYOTTE. General Paxton and General Glueck, in your prepared joint statement, you state that, “As we continue to face the possibility of further budget reductions under sequestration, we may be forced into adopting some variation of a less ready, temporarily tiered status within the next few years in order to make critical investments that are being deferred today.” Can you describe in more detail what you mean by a “less ready, temporarily tiered status”?

General PAXTON and General GLUECK. It will manifest itself in fewer Active component marines, less investment in training and infrastructure, and forgoing modernization. If forced to continue along this path, we will risk a force that is tiered in its capabilities. Forces rotated or deployed forward will leave the continental United States best-dressed, but most of those remaining back at their home base or station will be degraded. In aggregate, the force will likely be one that is less well-trained, equipped, and ready for war than what the American people have come to expect from their All-Volunteer military.

11. Senator AYOTTE. General Paxton and General Glueck, how can Congress help you avoid making these tradeoffs?

General PAXTON and General GLUECK. During this first year of sequestration, the Marine Corps was able to realign funds to maintain the near-term readiness of our forward deployed forces and those units preparing to deploy. If further budget reductions under sequestration return in 2016, we need Congress to intervene and provide us the flexibility to determine where those reductions are made rather than the mandatory across the board cuts that the law requires.

#### MODERNIZATION PRIORITIES AND SHORTFALLS

12. Senator AYOTTE. General Paxton and General Glueck, what are the Marine Corps' leading modernization priorities?

General PAXTON and General GLUECK. The Marine Corps has several critical modernization priorities in the fiscal year 2015 budget. These priorities are balanced between our ground and aviation programs to continue to enhance the flexibility and capability of the Marine Corps Air-Ground Task Force. Our key ground programs are the ACV, JLTV, and enhancements to our aging AAV fleet. These modernization efforts coupled with Navy investments in enhanced surface connectors are key enablers of the Marine Corps' ability to remain an elite expeditionary force. Our aviation priorities are the F-35B, the MV-22, and the CH-53K. The combination of capabilities that these aviation and ground programs provide our Service, and our Nation, are critical to the way that the Marine Corps envisions being employed into the 21st century.

13. Senator AYOTTE. General Paxton and General Glueck, does the fiscal year 2015 budget request adequately resource your modernization priorities?

General PAXTON and General GLUECK. The fiscal year 2015 budget protects funding for these key priorities, at the cost to other programs and investments in infrastructure. With the smallest modernization budget in DOD, the Marine Corps continually seeks to leverage the investments of other Services, carefully meting out our modernization resources to those investment areas which are the most fiscally prudent and those which promise the most operationally effective payoffs. Innovative warfighting approaches and can-do leadership are hallmarks of the Marine Corps, but these cannot overcome the vulnerabilities created by our rapidly aging fleet of vehicles, systems, and aircraft. Long-term shortfalls in modernization will have a detrimental impact on readiness and, at some point, sustaining fleets of severely worn vehicles becomes inefficient and no longer cost-effective. This inefficiency reduces available modernization resources from an already small account, degrading our ability to effectively operate in today's complex security environment.

14. Senator AYOTTE. General Paxton and General Glueck, how will sequestration in fiscal year 2016 and beyond impact your modernization priorities?

General PAXTON and General GLUECK. A fully sequestered budget in fiscal year 2016 will cause the Marine Corps to preserve investments in these key modernization priorities at a greater cost to other investments and programs. Under sequestration we will begin to see impacts on these major acquisition programs, for example the CH-53K program could see a delay in IOC by 1 year and procurement of 10 aircraft deferred outside the Future Years Defense Program. The already difficult trades being made today will only increase in quantity and severity to preserve funding for key priorities; this includes significant costs to near-term readiness levels.

#### RESET

15. Senator AYOTTE. General Paxton and General Glueck, in your prepared joint statement, you say that the Marine Corps needs \$1 billion to reset your ground equipment as we transition in Afghanistan. You go on to say that the Marine Corps will need "at least 24 months" of reset funding from when the last pieces of equipment return from Afghanistan. What specifically will this reset funding be used for?

General PAXTON and General GLUECK. Reset funding will be used to repair, recapitalize, or replace ground combat equipment deployed in support of Operation Enduring Freedom (OEF) and to posture the Marine Corps for future missions. Recognizing the magnitude and importance of the reset effort, we developed an OEF Reset Strategy in January 2012 that represents an institutional commitment to addressing the complexities of returning our equipment from Afghanistan and restoring those capabilities through depot rebuild and replacement, if required. This com-

prehensive strategy ensures that our retrograde and reset actions are informed by equipment requirements of the post-OEF force, total life cycle management strategies, acquisition and modernization plans, and accurate serviceability assessments, while prioritizing the divestiture of equipment that is either obsolete or excess to our future needs.

16. Senator AYOTTE. General Paxton and General Glueck, what is the readiness impact if Congress does not provide this reset funding?

General PAXTON and General GLUECK. Due to the generosity and support of Congress, the Marine Corps is over 45 percent complete with the reset of ground combat equipment returned from Afghanistan. However, a significant amount of reset work remains to be done through an effort that is expected to continue through fiscal year 2016. In the absence of funding needed to repair, recapitalize, and replace remaining ground combat equipment, the Marine Corps would not achieve reconstitution of the force by fiscal year 2017 and would likely confront readiness challenges in the operating forces as equipment would not be available for issue from our depots. Currently, over half of nondeployed units have equipment shortfalls resulting from longstanding Commandant of the Marine Corps guidance to fully equip forward deployed forces. This imbalance of readiness across the Marine Corps would be further exacerbated if reset funding is not provided. Nondeployed forces serve as a shock absorber, providing a timely response to unexpected crises or large-scale contingencies. If those units are not fully equipped, it could result in a delayed response to resolve a contingency or execute operations abroad.

17. Senator AYOTTE. General Paxton and General Glueck, what are the risks if Congress does not fully fund reset?

General PAXTON and General GLUECK. The Marine Corps requires continued funding to complete the reset of ground combat equipment, reconstitute home station units, and modernize the force. A reduction in reset funding would ultimately delay completion of those critical readiness-generating activities needed to reconstitute the force in support of forward presence and potential crisis response missions. Reduced reset funding would create a backlog of equipment at our organic depot facilities, delay the repair of equipment, and further perpetuate the imbalance of equipment readiness levels that exists between our deployed and nondeployed forces. Reduced reset funding would also risk further delay in essential elements of equipment modernization resulting from our priority to preserve current readiness.

#### AMPHIBIOUS COMBAT VEHICLE

18. Senator AYOTTE. General Paxton and General Glueck, the Marine Corps fiscal year 2015 procurement request is \$983.3 million, down from \$1.2 billion fiscal year 2014 enacted levels. This is a 28 percent reduction. The ACV is a high priority. The Marine Corps has stopped and started this program several times. Do you believe this program is on track?

General PAXTON and General GLUECK. Yes, we believe the program is on track. Given the uncertainty of the fiscal picture, we were forced to defund MPC in order to protect near-term readiness; however, the Marine Corps still retained the MPC as a validated, but unfunded requirement inside the Ground Combat and Tactical Vehicle portfolio. We are leveraging the previously developed MPC requirements and engineering, and government evaluation of vendor prototypes to streamline the acquisition process. The draft requirements for the MPC are the capability basis for ACV Phase I. These requirements account for lessons learned over the past 3 years of MPC and ACV capability development and the emerging reprioritized way ahead for AAV modernization.

#### JOINT LIGHT TACTICAL WHEELED VEHICLE PROGRAM

19. Senator AYOTTE. General Paxton and General Glueck, what is your assessment of the JLTV program?

General PAXTON and General GLUECK. The JLTV is needed to provide the Corps with modern expeditionary light combat and tactical mobility while increasing the force protection and survivability of that class of vehicles. Working closely with the Army as the lead Service, the Marine Corps is an equal partner in developing this key system in the tactical wheeled vehicle fleet of the joint force. We initially plan to procure 5,500 JLTVs to meet the most critical need in the light combat mission roles.

20. Senator AYOTTE. General Paxton and General Glueck, how important is the JLTV to the Marine Corps?

General PAXTON and General GLUECK. The JLTV is needed to provide the Corps with modern expeditionary light combat and tactical mobility while increasing the force protection and survivability of that class of vehicles. We initially plan to procure 5,500 JLTVs to meet the most critical need in the light combat mission roles.

21. Senator AYOTTE. General Paxton and General Glueck, what is the level of collaboration on the program with the Army?

General PAXTON and General GLUECK. We remain fully partnered with the Army. From a business perspective, collaboration has enabled the Marine Corps to leverage significant Army fiscal, manpower, and test resources in the refinement of operational capabilities and the research, development, and acquisition of technical solutions to meet the program requirements.

22. Senator AYOTTE. General Paxton and General Glueck, are the Army and Marine Corps collaborating sufficiently to improve efficiency and achieve economies of scale?

General PAXTON and General GLUECK. Yes. Long-term benefits for both the Marine Corps and the Army will be realized during the production phase, in that both Services will incur lower average unit costs due to the economies of scale afforded by the combined quantities in the JLTV production rates of baseline vehicles.

#### OVERSEAS CONTINGENCY OPERATIONS FUNDING

23. Senator AYOTTE. General Paxton and General Glueck, overall Marine Corps operations and maintenance (O&M) accounts are up \$531.2 million over fiscal year 2014 enacted levels. However, depot maintenance is only funded at 83 percent of the requirement and reset requirements have not been addressed in Overseas Contingency Operations (OCO). I understand your reset requirement and some of your depot maintenance requirements are funded through OCO. What is the impact on readiness if these requirements are not met in OCO?

General PAXTON and General GLUECK. The fiscal year 2015 growth in O&M, Marine Corps of \$531.2 million reflects the baseline restoration of the \$700 million transferred to OCO in the 2014 Consolidated Appropriations Act and \$168.8 million of programmatic reductions. Approximately 77 percent of equipment has retrograded from theater; however, only approximately 40 percent has been reset and returned to the operating forces to support home station readiness or redeployed in support of steady state operations. As such, the Marine Corps will continue to require OCO for the next several years to complete retrograde and reset requirements after more than a decade of sustained combat operations. In the absence of reset funding to repair, recapitalize, and replace ground combat equipment, the Marine Corps would experience a gradual but dangerous decline in readiness. Currently, over half of nondeployed units have equipment shortfalls as a result of the priority to fully support forward presence and crisis response. In the short-term, the absence of reset funding would further degrade nondeployed readiness in order to fully equip forward deployed forces. Nondeployed forces serve as a shock absorber, providing a timely response to unexpected crises or large-scale contingencies. If those units are not ready, it could cause a delay in our response to contingencies or combat operations. Ignoring the impact of funding deployed units at the expense of readiness of nondeployed units for any sustained period will adversely affect the force in the long-term, and create unacceptable risk for national defense.

24. Senator AYOTTE. General Paxton and General Glueck, can the Marine Corps absorb that expense in your base budget?

General PAXTON and General GLUECK. The Marine Corps cannot absorb estimated reset and retrograde liabilities within our baseline budget levels. The Marine Corps estimates the remaining ground equipment reset liability for fiscal year 2015 and beyond to be approximately \$1 billion. In addition, the Marine Corps estimates the remaining retrograde requirement for fiscal year 2015 and beyond to be between \$150 million and \$250 million, based on the anticipated drawdown in Afghanistan and the available modes of transportation back to the continental United States.

#### AMPHIBIOUS SHIP REQUIREMENT

25. Senator AYOTTE. General Paxton and General Glueck, I understand that the Marine Corps amphibious ship requirement is 38. The current budget includes 30

at the end of fiscal year 2015 and 33 by the end of fiscal year 2019. What is the readiness impact or opportunity costs of not meeting the requirement of 38?

General PAXTON and General GLUECK. The Navy's investment in amphibious warships represents critical investments that enable naval forces to execute their assigned forward presence and crisis response missions. The Chief of Naval Operations and Commandant of the Marine Corps have determined that the force structure required to support a 2.0 Marine Expeditionary Brigade (MEB) Assault Echelon (AE) is 38 amphibious warfare ships, as communicated to the House and Senate Appropriations Committees and the House and Senate Armed Services Committees by the Secretary of the Navy/Chief of Naval Operations/Commandant of the Marine Corps letter dated January 7, 2009. Given fiscal constraints, the Navy determined a minimum inventory of 33 total amphibious warfare ships, including 11 Amphibious Assault Ships LHD/LHA(R), 11 LPD 17, and 11 LSD 41/49s; this represents the limit of acceptable risk in meeting the 38-ship requirement for the AE in a 2 MEB forcible entry operation. The Long Range Plan for Construction of Naval Vessels for 2015 shows the Navy achieving 33 amphibious ships by fiscal year 2019, the preferred mix of 11/11/11 isn't reached until fiscal year 2025. This inventory provides only the minimum capacity for steady state Amphibious Ready Group/Marine Expeditionary Unit deployments and single-ship deployments for theater security cooperation activities. Furthermore, this inventory does not provide the capacity to support additional independent amphibious warship demands, such as maritime security operations. A reduction in capacity detracts from the ability of the Navy and the Marine Corps to accomplish forward presence and crisis response missions in today's exceptionally dynamic and uncertain operational environment. The cost of not meeting the requirement of 38 ships results in our Nation being less capable to rapidly respond to emerging crises.

26. Senator AYOTTE. General Paxton and General Glueck, what is the Marine Corps doing to mitigate this shortfall?

General PAXTON and General GLUECK. In the short-term, we are accepting risk to aviation and vehicle lift. We may be able to further reduce the risk through temporary coordination of carrier tactical aviation or joint force air-support, and by delivering additional support vehicles via MLP and/or JHSV to support ground maneuver. Innovative approaches and employment models are being planned to mitigate some impacts to presence missions caused by early ship retirements. With increased investment in the capabilities of JHSV and MLP, some of the risk associated with missions in permissive environments may be reduced by increasing reliance on these platforms. These new ships can take on a potentially valuable role in security cooperation, humanitarian assistance, and disaster response, which could release amphibious warships to meet other global demand signals. Furthermore, intended follow-on assault support shipping could be utilized to reduce risk in lift capacity under certain scenarios and during specific phases of an operation.



**DEPARTMENT OF DEFENSE AUTHORIZATION  
OF APPROPRIATIONS FOR FISCAL YEAR  
2015 AND THE FUTURE YEARS DEFENSE  
PROGRAM**

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**THURSDAY, APRIL 10, 2014**

U.S. SENATE,  
SUBCOMMITTEE ON SEAPOWER,  
COMMITTEE ON ARMED SERVICES,  
*Washington, DC.*

**NAVY SHIPBUILDING PROGRAMS**

The subcommittee met, pursuant to notice, at 2:33 p.m. in room SR-222, Russell Senate Office Building, Senator Jack Reed (chairman of the subcommittee) presiding.

Committee members present: Senators Reed, Shaheen, Blumenthal, Kaine, King, McCain, Sessions, and Wicker.

**OPENING STATEMENT OF SENATOR JACK REED, CHAIRMAN**

Senator REED. The hearing will come to order. Let me welcome the witnesses and my colleagues this afternoon. We're honored to have the Honorable Sean J. Stackley, Assistant Secretary of the Navy for Research, Development, and Acquisition; Vice Admiral William H. Hilarides, USN, Commander, Navy Sea Systems Command; and Vice Admiral Joseph P. Mulloy, USN, Deputy Chief of Naval Operations for Integration of Capabilities and Resources. Thank you, gentlemen.

We are grateful to each of you for your service to the Nation and your truly professional service to our Navy and to our Nation, but also we're grateful for the professional service of the men and women under your command. Please thank them for us. We also pay tribute to their families because, obviously, they serve as well.

I especially want to welcome Admiral Hilarides this afternoon because I believe this is your first opportunity to appear before the committee as Commander of the Naval Sea Systems Command. Welcome, Admiral.

Today our witnesses face huge challenges as they strive to balance the need to support ongoing operations and sustain readiness with the need to modernize and keep the technological advantage that is so critical to military success. These challenges have been made particularly difficult by the spending caps imposed by the Budget Control Act (BCA), caps that were modestly relieved for fiscal year 2015 in the Bipartisan Budget Act (BBA) that we enacted

in December. However, these caps are scheduled to resume in fiscal year 2016 and beyond.

These caps already seriously challenge our ability to meet our national security needs and have already forced all of the military departments to make painful tradeoffs. Unless modified for the years after fiscal year 2015, they will threaten our long-term national security interests.

The Navy continues to face a number of critical issues as it tries to balance its modernization and procurement needs against the cost of current operations. Principally complicating these efforts this year to support current operations throughout the world is the specter of sequestration. The shipbuilding budget remains at a level where it will be difficult, if not impossible, to field the Navy that we believe we need. Sequestration in fiscal year 2016 and later will only exacerbate the shortfall that we anticipate.

We need to understand how sequestration may complicate the Navy's job of maintaining current readiness while building the fleet of the future. With that in mind, a continuing focus of this subcommittee has been to see that we improve our acquisition stewardship and thereby ensure that we are getting good value for every shipbuilding dollar that we spend.

We're pleased at the overall stability and performance and the *Virginia*-class submarine production level of two ships a year. I would note that in a former life Admiral Hilarides was the program executive officer in charge of the *Virginia*-class procurement. Thank you, sir. We also support the Navy's current efforts and continuing efforts to drive cost out of the *Ohio* replacement program (ORP). The strategic submarines will remain a vital leg of the nuclear triad for the foreseeable future. Establishing and achieving cost reduction goals on these *Ohio*-class and *Virginia*-class programs will yield significant stability to our Navy's submarine industrial base.

There is one concern, among many, and that is that cuts in the National Nuclear Security Administration (NNSA), which is outside the scope of this subcommittee, in the Department of Energy (DOE), may have consequences for the ORP schedule. We need to hear about that this afternoon in terms of the impacts of the DOE budget on your operations.

The aircraft carrier programs are another important area for discussion as well. We need to hear about the progress the Navy and the contractors are making to deliver USS *Gerald R. Ford* (CVN-78) within the cost cap we modified last year, what progress is being made on reducing the production costs of the USS *John F. Kennedy* (CVN-79), and later carriers.

In addition, the Navy budget and the Future Years Defense Program (FYDP) will retire the USS *George Washington* rather than execute the refueling overhaul as planned last year. This would lead to a permanent reduction of the carrier force structure to 10 carriers and 9 air wings.

Another topic that we have to address is the Littoral Combat Ship (LCS). Senator McCain delivered a very thoughtful, very eloquent speech last evening. I was particularly struck by one point he made that we designed many of our shipbuilding programs, not just LCS, with the notion of a permissive environment at sea and

that is rapidly changing. I think in every shipbuilding program we have to factor that in, and he made that point very thoughtfully last evening.

Last, we really have to assess where the Navy and the contractors stand on improving the overall cost, quality, and schedule performance of Navy shipbuilding programs, every shipbuilding program. We can always do better.

When the subcommittee has met in the last few years, we've focused primarily on these programs, particularly programs with quality control and cost problems. It's never a pleasant situation. We received testimony from the Navy that you're aware of the problems, you're dealing with the problems, but we want to hear today the progress you've made and the progress you have yet to make in the future, because every dollar we're able to save through efficiencies in shipbuilding is a dollar we can use for operations and maintenance (O&M), and maintaining not only the fleet, but to maintain our national security.

Thank you very much for what you've done. I don't have to remind everyone or anyone in this room that the fiscal environment is very difficult as we look forward to try to build the Navy that the Nation needs. We have to manage these programs in a way that we have the dollars necessary to build that fleet.

I look forward to your testimony. At this point, I'd like to recognize Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman. Thank you for holding this hearing on the Navy's shipbuilding program and the President's budget request. I look forward to working with you to ensure that the subcommittee and our Nation have a clear understanding of the needs of our naval forces. I want to thank our witnesses and the men and women in the Navy and Marine Corps for their dedicated public service. I just will highlight a few issues that I look forward to discussing with the panel.

At a time when the United States and our allies are being challenged by emerging powers and old rivals alike, insufficient resources and wasteful procurement policies threaten to put our Navy in a state of decline. Within the shipbuilding program, critical issues like quality control, cost containment, and survivability remain elusive. Even identifying operational requirements and validating ship designs before production, a common-sense practice, seems beyond the reach of the procurement system.

I trust that our witnesses are prepared to address these issues today with the subcommittee and outline specific steps under way to ensure the Navy's shipbuilding programs are on the right course, particularly on the issue of cost containment.

I'll skip a couple of paragraphs here in my statement and ask that my full statement be made part of the record.

Recently, Admiral Jonathan W. Greenert, USN, Chief of Naval Operations (CNO), pointed out that the Navy would need a 450-ship fleet in order to meet the needs of combatant commanders. Just to sustain a 300-ship fleet, the Navy will need to buy 10 ships per year with an average service life of 30 years. Last year's budget bought eight ships. This year's budget buys only seven. The Navy shipbuilding plan does not include enough annual funding to sustain its goal of a 306-ship fleet.

Because of sequestration, as well as a lack of budget discipline, the Navy is having to resort to a gimmick under which it is laying up ships in a reduced operating status for up to 10 years and calling it a phased maintenance plan.

Finally, regarding the LCS, last week the Government Accountability Office (GAO) released its annual weapons assessment, yet again raising concerns about this troubled program. I've spoken at length about the LCS, most recently on the Senate floor just yesterday. I'm glad to see that the program appears to be getting the level of attention it needs all the way up to Secretary of Defense Chuck Hagel. The Secretary is now proposing to cap LCS production at 32 ships. But as outlined in last year's National Defense Authorization Act (NDAA), unless the Navy meets required performance parameters by 2016, the procurement will end at 24 ships. I take great interest in this important project and look forward to your update on the status of the program.

Thank you, Mr. Chairman.

[The prepared statement of Senator McCain follows:]

PREPARED STATEMENT BY SENATOR JOHN MCCAIN

Mr. Chairman, thank you for holding this hearing on the Navy's shipbuilding programs in the President's budget request for fiscal year 2015. I look forward to working with you to ensure that the committee and our Nation have a clear understanding of the needs of our naval forces.

I want to thank our witnesses and the men and women of the U.S. Navy and Marine Corps for their dedicated public service. In the interest of time for questions, I will highlight a few issues that I look forward to discussing with the panel.

At a time when the United States and its allies are being challenged by emerging powers and old rivals alike, insufficient resources and wasteful procurement policies threaten to put our Navy in a state of decline. Within the shipbuilding program, critical issues like quality-control, cost-containment, and survivability remain elusive. Even identifying operational requirements and validating ship designs before production—a common-sense practice—seem beyond the reach of the procurement system. I trust that our witnesses are prepared to address these issues today with the committee and outline specific steps underway to ensure the Navy's shipbuilding programs are on the right course—particularly on the issue of cost containment.

With that said, there continues to be a discrepancy between the global threats facing our country and the President's apparent reluctance to take those threats into account in the budgets he has submitted to Congress. This inconsistency sends mixed messages to our allies, limits our strategic options both now and in the future, and signals a fundamental retreat from world affairs at a time when American leadership is needed most. Events across the Middle East, Africa, the East and South China Seas, and most recently in Ukraine have brought into sharp focus a reality the President seems unwilling to accept: threats to our security are not receding—they are on the rise. Drawing down our forces and defense spending might save dollars today, but they will likely jeopardize our security in the future. For this reason, the President's budget for defense spending for fiscal year 2015 is misguided.

Moreover, the administration has not yet made its long-term shipbuilding plan clear. Whatever goals the President has for the Navy, they will be difficult to achieve if we continue indiscriminately slashing our national security budget. The course the President is charting will not only leave us with a smaller Navy but with a less capable one. We risk repeating failed budget-reduction strategies of our past. Additionally, the Navy seems to be placing too much trust in untested, unproven ship classes and weapon systems to replace legacy platforms. Those legacy platforms are being retired before their replacements can be fully tested, funded, and fielded.

Recently, Admiral Greenert pointed out that the Navy would need a 450-ship fleet in order to meet the needs of combatant commanders. Just to sustain a 300-ship fleet, the Navy will need to buy 10 ships per year, with an average service life of 30 years. Last year's budget bought eight ships; this year's budget buys only seven. The Navy's shipbuilding plan does not include enough annual funding to sustain its goal of a 306-ship fleet.

Our combatant commanders are feeling the effect of limited resources just as our global competitors are ramping up their naval capabilities. Last month, U.S. Pacific Command Commander Admiral Locklear testified that anti-submarine requirements in his area of responsibility are not being met. How can our allies and our adversaries take the so-called pivot to the Pacific seriously, when we aren't even adequately resourcing the requirements of our combatant commanders? While the President has decided to shrink the submarine force, the Chinese are investing to grow theirs. They are also building aircraft carriers and developing a new ballistic missile that will continue to close the gap between our respective maritime capabilities.

Further complicating our ability to sustain even a 300-ship Navy is the enormously expensive acquisition of a replacement for the aging *Ohio*-class ballistic missile submarine, the centerpiece of our naval nuclear deterrent. The Navy must come up with an affordable way to build the new *Ohio*. An expensive new *Ohio* could jeopardize the 300-ship goal by limiting funding for other naval procurements, weaken the Navy's nuclear deterrent—or both. The new *Ohio* will require annual spending of well over \$6 billion per year. Without additional Navy procurement funding, the *Ohio* replacement will crowd out other ships, as well as other Navy and Marine Corps investment and readiness needs—greatly increasing the prospect of a hollow naval force.

Because of sequestration as well as a lack of budget discipline, the Navy is having to resort to a gimmick under which it is laying up ships in a “reduced operating status” for up to 10 years and calling it a “phased maintenance plan”. These ships would be stripped of their crews to free up funds, which would be used to repair the ships and extend their service life. This plan will make the pivot to the Pacific even more challenging.

Finally, regarding the Littoral Combat Ship (LCS), last week the Government Accountability Office released its annual weapons assessment, yet again raising concerns about this troubled program. I have spoken at length about LCS—most recently on the Senate floor just yesterday. I am glad to see that the program appears to be getting the level of attention it needs, all the way up to the Secretary of Defense. The Secretary is proposing to cap LCS production at 32 ships. But, as outlined in last year's National Defense Authorization Act, unless the Navy meets required performance parameters by 2016, the procurement will end at 24 ships. I take great interest in this important project, and look forward to your update on the status of the program.

The President's budget submission puts the Navy's global-presence mission in peril, and it's looking more and more likely to succumb to the same fate that has befallen the once-mighty British fleet. The Nation needs to reset its fiscal priorities and embark on a second Reagan-like build-up of our Nation's Armed Forces, and in particular, our Navy. But additional fiscal commitment, while necessary, is not enough. Even with more funding, we cannot afford—financially or operationally—to make expensive mistakes in program management and oversight.

I look forward to hearing from our witnesses. Thank you, Mr. Chairman.

Senator REED. Thank you, Senator McCain.

Do any of my colleagues want to make a brief statement? [No response.]

If not, we'll go to the witnesses. Thank you very much. Secretary Stackley, please proceed.

**STATEMENT OF HON. SEAN J. STACKLEY, ASSISTANT SECRETARY OF THE NAVY FOR RESEARCH, DEVELOPMENT, AND ACQUISITION; ACCOMPANIED BY VADM WILLIAM H. HILARIDES, USN, COMMANDER OF THE NAVAL SEA SYSTEMS COMMAND; AND VADM JOSEPH P. MULLOY, USN, DEPUTY CHIEF OF NAVAL OPERATIONS FOR INTEGRATION OF CAPABILITIES AND RESOURCES (N8)**

Mr. STACKLEY. Yes, sir. Thank you, Mr. Chairman. Chairman Reed, Ranking Member McCain, distinguished members of the subcommittee: Thank you for the opportunity to appear before you today to address Navy shipbuilding programs. Joining me today are the Deputy Chief of Naval Operations for Capabilities and Re-

sources, Vice Admiral Mulloy, and the Commander of Naval Sea Systems Command, Vice Admiral Hilarides.

With the permission of the subcommittee, I propose to provide brief opening remarks and submit a separate formal joint statement for the record.

Senator REED. All statements will be made part of the record, from my colleagues and the witnesses.

Mr. STACKLEY. Thank you, sir.

Just 2 years ago in testimony before this subcommittee, the Navy described how we had reshaped our shipbuilding, aviation, weapons, and tactical vehicle plans to reflect the priorities of the new defense strategy, and Congress strongly supported that year's 2013 budget request. In fact, funding was increased for additional ships and aircraft. However, sequestration more than offset those gains and the Department of the Navy ended up about \$11 billion out of balance across O&M and investment.

Last year, we again submitted a budget sized and shaped to provide the capability, capacity, and readiness required by the defense strategy. While this subcommittee was particularly supportive of our request, at the end of the day, the bottom line is the BBA reduced the Navy-Marine Corps budget by \$6 billion in 2014 and another \$15 billion in 2015.

This year's budget submission is anchored by the BBA in 2015 and, though we exceed the BCA caps across the FYDP, the Navy-Marine Corps request falls \$38 billion below the level planned just 1 year ago.

To minimize the impact of this reduced top line, we've leveraged every tool available to drive down cost. We've tightened requirements, maximized competition, capitalized on multi-year procurements for major weapons systems, and we've attacked our cost of doing business from headquarters billets to service contracts, so that more of our resources can be dedicated to making warfighting capability.

In balancing resources and requirements, we have placed a priority on forward presence, near-term readiness, stability in our ship-building program, and investment in those future capabilities that are critical to our long-term technical superiority.

With particular regard to Navy shipbuilding, we have kept on track towards our objective of the 300-ship Navy—7 first-of-class ships met major milestones:

- *Gerald R. Ford*, the first new designed carrier since *Nimitz*;
- *Zumwalt*, the first new designed destroyer since *Arleigh Burke*, both launched this past year, just 1 week apart;
- Amphibious assault ship (AAS) *America* (LHA-6);
- Joint high speed vessel (JHSV) *Spearhead* (JHSV-1);
- Mobile landing platform (MLP) *Montford Point* (MLP-1), all three delivered to the fleet;
- *Freedom* (LCS-1) completed her 10-month maiden deployment; and finally
- We laid the keel for the first afloat forward staging base (AFSB), *Puller* (MLP-3).

We are on schedule in the accomplishment of design and development of the ORP, the LHA-8 AAS, the Flight 3 DDG-51 destroyer, and its air and missile defense radar.

In total, 43 ships are under construction in shipyards and weapons factories stretching across the country. Most have been competitively awarded and, with the exception of the lead ships of the *Zumwalt* and *Gerald R. Ford* class, all are fixed price, and program-by-program cost and quality are demonstrating steady improvement ship over ship.

Yet, this critical industrial base is fragile and we will need to work closely with Congress and industry and ultimately rely upon Congress' support to keep it whole as we navigate the budget beyond the BBA. However, if we are required to return our budget to BCA levels in 2016, then, even with the priority placed on shipbuilding across the board, with the lone exception of our highest priority program, the ORP, every ship program will suffer reductions.

I would like to briefly describe three critical issues posed by our budget request. First, the refueling complex overhaul of *George Washington* (CVN-73). The Navy has a requirement for 11 aircraft carriers and title 10 requires the Navy to retain 11 aircraft carriers, and the 2014 President's budget included funding to commence the CVN-73 refueling and complex overhaul (RCOH) in September 2016. In formulating the 2015 budget, concurrent with conducting the strategic choices management review, the Department of Defense (DOD) determined that if we are required to budget to BCA levels we would be compelled to inactivate two or three aircraft carriers.

The Navy rebalanced the rest of its program, leveraged across-the-board efficiencies, and accepted risk in other areas in order to reduce the impact of BCA-level funding to the potential loss of one carrier only. Yet undetermined is whether we will be required to budget to BCA levels in 2016 and beyond.

There is sufficient schedule margin at Newport News to delay the start of the CVN-73 RCOH a full year or more without impacting the start of the following carrier, USS *John C. Stennis* (CVN-74), in her refueling overhaul. Therefore, the Navy is proceeding under Program Objective Memorandum (POM)-16 guidance to program the CVN-73 refueling complex overhaul, albeit delayed, pending a final determination, presumably following Congress' action on the 2015 budget, regarding out-year budget assumptions.

In all scenarios we have to be mindful of the cost to refuel CVN-73 plus maintain its air wing manpower and support, approximately \$7 billion across the years 2015 to 2019.

Second, cruiser and dock landing ship (LSD) modernization. The oldest 11 cruisers, CG-52 through 62, have been modernized and will deploy with carrier battle groups until their end of service, commencing in 2019. The Navy plans to modernize and extend the service life of the remaining 11 cruisers, CG-63 through 73, through an extended phases modernization program. The elements of the program are that we will commence in 2015 the planning and material procurement for repair and modernization of hull, mechanical, and electrical systems for all 11 cruisers. The work will be scheduled to ensure efficient execution and to the extent prac-

tical to provide stability to the industrial base. Once complete, the hull, mechanical, and electrical phase, these cruisers will be maintained in the modernization program until completion of their subsequent combat systems modernization, which will be aligned with the retirement of the first 11 cruisers.

A similar yet simpler approach is planned for three of the LSD-41 class ships. This Navy plan is made affordable by drawing down ship manpower and operating costs during the extended modernization period, a cost avoidance in excess of \$6 billion. It ensures we are able to sustain the 12-ship LSD-41/49 class for its full service life and the critical air defense commander capabilities of the cruiser force beyond its current service life into the 2040s.

It also retains flexibility, if needed, to accelerate completion of the modernization pending availability of added funding and training of additional crews.

Third, the LCS program. The CNO's requirement for 52 small surface combatants (SSC) remains solid. The LCS shipbuilding program is demonstrating significant cost improvement as a result of the block buy. The most recently awarded ship contracts are less than half the cost of the lead ship in constant year dollars. Requirements are stable and contract changes since the lead ships have tracked on the order of 1 percent of the ship's cost, significantly less than other surface combatant ships.

Mission packages are executing in accordance with their approved test plans, with operational testing of the first increment surface warfare mission package completing this month; operational testing of the mine countermeasures and antisubmarine warfare (ASW), mission packages on track for 2015 and 2016, respectively.

USS *Freedom* performed her required missions plus supported humanitarian assistance, disaster relief efforts following Super Typhoon Haiyan during her 10-month deployment and valuable lessons from her deployment are being used to shape support strategies for future LCS deployments.

Separately, we are conducting a thorough review of LCS requirements, capabilities, and concepts of operation to determine, in accordance with the directions of the Secretary of Defense, how to increase the lethality and capabilities of the Navy's SSCs. We will consider a new design, alternative existing designs, and a modified LCS in this study, and the results are intended to inform our 2016 budget submission.

In total, as a result of the cumulative impact of the sequestration in 2013, the BBA-level funding in 2014 and 2015, and the reductions across 2015 through 2019, the Department of the Navy has been judicious in controlling costs, reducing procurements, stretching developments, and delaying modernization. However, these actions necessarily add cost to our programs, add risk to our industrial base, and add risk to our ability to meet the Defense Strategic Guidance (DSG).

If we are forced to execute at BCA levels in fiscal years 2016 and beyond, these cuts will go deeper and we fundamentally change our Navy and Marine Corps and the industrial base we rely upon.

Mr. Chairman, thank you for the opportunity to appear before you today. We look forward to answering your questions.



[The joint prepared statement of Mr. Stackley, Admiral Hilarides, and Admiral Mulloy follows:]

PREPARED STATEMENT BY HON. SEAN J. STACKLEY, VADM WILLIAM H. HILARIDES, USN, AND VADM JOSEPH P. MULLOY, USN

Chairman Reed, Senator McCain, and distinguished members of the subcommittee, thank you for the opportunity to appear before you today to address the Department of the Navy Shipbuilding Programs. The fiscal year 2015 President's budget submission is governed by the 2014 Quadrennial Defense Review which implements the 2012 Defense Strategic Guidance (DSG), albeit with higher risk, and continues our efforts to ensure our ability to fight and win the Nation's wars, operate forward, and sustain readiness. Although forestalled somewhat in fiscal year 2014 and 2015 by the Bipartisan Budget Act (BBA) of 2013, the principal risk to the Department's ability to meet the DSG remains the considerable uncertainty in future funding. This uncertainty hinders planning and impedes balancing near- and long-term readiness and capability. In working to mitigate this challenge, we have set priorities in our shipbuilding, aviation, weapons, and combat vehicle plans. We have worked aggressively within the Department of the Navy to reduce and control the costs of our acquisition programs. In all these efforts, our principal requirement remains to equip the Navy and Marine Corps with the most effective warfare systems, through procurement, modernization, and sustainment, to address the security challenges of today and tomorrow. The Department will continue to work closely with Congress to maintain the right balance across capacity, capability, readiness, and the industrial base.

Though budget issues, including furloughs and the Government shutdown, have been hard on the Department, our sailors and marines deployed around the world continued to perform the mission last year and get the job done, being where it mattered when it mattered.

The year began with the USS *John C Stennis* (CVN-74) carrier strike group and the USS *Bonhomme Richard* (LHD-6) amphibious ready group, embarked with the 31st Marine Expeditionary Unit, both on patrol. Carrier Air Wing 7 and USS *Dwight D Eisenhower* (CVN-69) left for a 4-month deployment only 2 months after returning home from a 6-month deployment. The carrier strike group included, for the first time, a German ship—FGS Hamburg. Our submarine forces continued to perform superbly around the globe. For example, in April, USS *Alabama* (Gold) (SSBN-731) completed a 108-day strategic patrol, one of the longest strategic ballistic missile submarines (SSBN) patrols in recent years. In recent weeks, the destroyer USS *Kidd* (DDG-100), P-3 aircraft, and our newest maritime patrol aircraft, the P-8A, have provided critical support in the search for the missing Malaysian airliner.

The Marine Corps continues to excel in response to today's evolving security environment. In April, marines stood up Special Purpose Marine Ground Task Force-Crisis Response in support of AFRICOM. In May, a marine rotational force deployed to Darwin, Australia in support of the Nation's Pacific Pivot.

In Afghanistan, I Marine Expeditionary Force (MEF) completed a year-long deployment furthering stability operations and transitioning the fight to Afghan-led operations. II MEF relieved I MEF at Camp Leatherneck in Helmand province. In March, Carrier Air Wing 9 left the U.S. Fifth Fleet area of responsibility after flying more than 9,000 sorties in support of coalition forces in Afghanistan.

In August, the Department of the Navy responded to chemical weapons attacks in Syria by patrolling four destroyers and USS *San Antonio* (LPD-17), with elements of the 26th Marine Expeditionary Unit onboard, in the Eastern Mediterranean to provide stability to the region. USS *Harry S Truman* (CVN-75), USS *Gettysburg* (CG-64), and USS *Bulkeley* (DDG-84) safeguarded the Northern Arabian Sea while the USS *Nimitz* (CVN-68) patrolled the Red Sea.

In November, the Navy and Marine Corps responded following the devastation of Typhoon Haiyan. USS *George Washington* (CVN-73), USS *Freedom* (LCS-1), USS *Ashland* (LSD-48), and USS *Germantown* (LSD-42) transited to the Philippines in support of relief efforts. More than 900 marines delivered supplies to the thousands of survivors left without food and water.

Our Nation's away team, the Navy and Marine Corps, continued this pattern of assuming the watch again and again throughout 2013. This operational tempo keeps nearly half of our fleet underway every day. Forty-eight thousand sailors and marines stand watch daily around the globe, constantly ready to do that which our Nation may ask them to do. No other military and no other nation on earth today, has the reach, the presence, the capability, the training and the resolve to maintain this pace or breadth of operations.

The Navy and Marine Corps are well-suited and uniquely positioned to perform the missions of the DSG, as implemented by the 2014 QDR. In addressing these requirements, the Department's fiscal year 2015 budget submission sustains our support to partners in the Middle East, rebalances our effort toward the Asia-Pacific region, focuses our presence at key maritime crossroads, and meets the highest-priority capability demands of the geographic combatant commanders. We made tough strategy-based choices to ensure a coherent budget that delivers the overseas presence directed by the Secretary of Defense in support of the Global Force Management Allocation Plan (GFMAP); continues our essential, near-term investments in the Middle East and Asia-Pacific; and develops capabilities over the long term to address warfighting challenges in these same regions. These tenets guide the priorities and direction of the Department of the Navy's fiscal year 2015 President's budget request.

However, the potential for a return to sequestration-level funding in fiscal year 2016 and future years increases our risk in meeting the current and future requirements necessary to meet our missions.

Despite its serious impacts, the 2013 sequestration was manageable in part because of key budget reprogrammings made by the Department, with congressional support. The Department was able to execute its plans for procurement of the ships appropriated for fiscal year 2013, and in particular was able to award the fiscal year 2013–2017 multi-year procurement (MYP) of DDG–51 class destroyers. In order to accomplish this however, the Department also had to mitigate impacts to some programs in execution to temporarily avoid reductions by deferring costs to future years.

Congress' passage of the BBA of 2013, which raised discretionary funding caps above the sequestration level for fiscal year 2014 and fiscal year 2015, allowed us to avoid indiscriminate funding reductions across all programs. As a result, the Department will be able to procure the eight ships appropriated in fiscal year 2014, including the additional 10th destroyer in the MYP. However, while the BBA provided some relief in fiscal year 2014 and fiscal year 2015, the lower funding levels compared to our fiscal year 2014 President's budget compelled the Department of the Navy to make tough choices and accept higher risk in our ability to meet the DSG. Today, the Navy is trying to manage the reduced funding levels by improving efficiencies, reducing costs, and providing stability where possible. The fiscal year 2015 request reflects the results of these efforts.

#### THE FISCAL YEAR 2015 PRESIDENT'S BUDGET REQUEST

As the Department moves into fiscal year 2015 and beyond, the fiscal year 2015 President's budget submission balances force structure, readiness, and capability to meet national security commitments. Simultaneously the plan is developed to minimize impacts to the industrial base where possible, in order to avoid further future increases in cost, or perhaps even permanent losses to our national industrial capability. A brief overview of shipbuilding programs follows.

##### *Shipbuilding*

The Navy reported to Congress in January 2013 the results of the Force Structure Assessment (FSA), which determined the capabilities of the future force needed to meet the full range of missions required of the Department of the Navy in support of the DSG. The FSA analysis resulted in a battle force requirement of 306 ships.<sup>1</sup>

The following table illustrates the differences between new and old Battle Force accounting guidelines:

	Today (April 3, 2014)	Fiscal Year 2015	Fiscal Year 2020
PB–15: New Guidelines .....	289	284	308
PB–15: Old Guidelines .....	283	274	304

The Department's shipbuilding plan continues to build toward the balanced force required by the FSA. In support of this, the fiscal year 2015 President's budget requests funding for seven ships: two *Virginia*-class attack submarines, two DDG–51 *Arleigh Burke*-class destroyers, and three Littoral Combat Ships (LCS). Additionally,

<sup>1</sup>It should be noted that the Department of the Navy revised guidelines for accounting for the size of the Navy's battle force. Therefore, numbers in this statement are not directly comparable to those used in prior testimony. Changes to guidelines include clarifying the accounting for smaller, forward deployed ships (e.g. patrol coastal, mine countermeasures ships, high speed transports) and ships routinely requested by combatant commanders (e.g. hospital ships).

the budget request includes continued incremental funding for CVN-79. The fiscal year 2015 submission for the Future Years Defense Program (FYDP) (fiscal year 2015 to fiscal year 2019) plans for the procurement of 44 ships.

While the Navy's fiscal year 2015 plan maintains our steady momentum towards achieving the FSA requirements, as the Chief of Naval Operations (CNO) stressed in his recent posture statement to the full committee, in order to remain a balanced and ready force while complying with the reduction in funding below our fiscal year 2014 levels, we were compelled to make difficult choices in the fiscal year 2015 plan. The fiscal year 2015 President's budget maintains the option to refuel or inactivate one nuclear aircraft carrier (CVN), and operate or shutdown a carrier air wing (CVW). If reduced Budget Control Act (BCA) levels remain in place in fiscal year 2016, USS *George Washington* (CVN-73) and associated air wing would need to be inactivated in lieu of conducting the planned refueling complex overhaul (RCOH). This decision will be made as part of our fiscal year 2016 budget submission.

An additional key component of our budget plan is a phased modernization of 11 cruisers, which are the most capable ships for controlling the air defense of a carrier strike group.

The Navy's Cruiser Modernization Plan will allow the Navy to reduce funding requirements while most efficiently increasing the capability and extending the service life of our large surface combatants.

Just beyond the FYDP, the Navy must recapitalize our SSBN force, manage the block retirements and replacement of aging SSBNs built in the 1980s and 1990s, and contain the cost of replacing these ships. The significant cost associated with recapitalizing the Nation's sea based strategic deterrent will require an increase of the shipbuilding budget, up to ~\$19 billion (fiscal year 2014 dollars). Our ability to meet the FSA battle force requirements is heavily dependent upon attaining this level of funding.

The key elements of the fiscal year 2015 shipbuilding request will now be discussed for each area of the plan.

#### *Aircraft Carriers*

Our aircraft carriers are central to our Nation's Defense Strategy, which calls for forward presence; ability to simultaneously deter potential adversaries and assure our allies; and capacity to project power at sea and ashore. These national assets are equally capable of providing our other core capabilities of sea control, maritime security, and humanitarian assistance and disaster relief. Our carriers provide our Nation the ability to rapidly and decisively respond globally to crises, with a small footprint that does not impose unnecessary political or logistical burdens upon our allies or potential partners.

*Ford*-class carriers will be the premier forward deployed asset for crisis response and early decisive striking power in major combat operations for the next half-century. We have established a steady state *Ford*-class procurement plan designed to deliver each new ship in close alignment with the *Nimitz*-class ship it replaces. The design improves warfighting capability, survivability, operational availability, and quality of life improvements for our sailors, while reducing crew and aviation wing size by as many as 1,200 personnel and decreasing total ownership costs by approximately \$4 billion per ship. *Gerald R. Ford* (CVN-78), the lead ship of the class, was launched on November 17, 2013. CVN-78 displaced 77,000 tons at launch and was 70 percent complete—the highest levels attained in aircraft carrier new construction. This unprecedented level of completeness by launch included the installation of the dual band radar (DBR) arrays, and the pulling of over 60 percent of electrical cable. As a result, CVN-78 is optimally prepared for its post-launch test program. CVN-78 will be delivered in fiscal year 2016 as the numerical replacement for the USS *Enterprise* (CVN-65), which was inactivated on December 1, 2012 after 51 years of active service.

The Navy is committed to delivering CVN-78 within the cost cap. We are continuing efforts to identify cost reductions; drive improved cost and schedule performance to contain cost growth; and reverse the rising cost trends associated with first-of-class non-recurring engineering, contractor and government furnished equipment (GFE), and ship production issues on the lead ship. The National Defense Authorization Act (NDAA) for Fiscal Year 2014 revised the CVN-78 cost cap to \$12,887 million. The fiscal year 2015 President's budget request aligns the CVN-78 budget with the cost cap.

The Navy and shipbuilder are also committed to driving down and stabilizing aircraft carrier construction costs for *John F. Kennedy* (CVN-79) and subsequent hulls. As a result of the lessons learned on CVN-78, the approach to carrier construction has undergone an extensive affordability review. The Navy and the shipbuilder have

made significant changes on CVN-79 to reduce the cost to build the ship. These efforts, identified in the May 2013, CVN-79 Report to Congress, include the following:

- Improvements in material availability and pricing;
- Major changes in build strategy and processes with a determined focus on executing construction activities where they can most efficiently be performed;
- Design changes for greater producibility; and
- Aggressive measures for cost control in GFE.

These efforts are ongoing and additional process improvements continue to be identified.

The Navy extended the CVN-79 construction preparation contract into 2014 to enable continuation of ongoing planning, construction, and material procurement while capturing lessons learned associated with lead ship construction and early test results. The continued negotiations of the DD&C contract afford an opportunity to incorporate further construction process improvements and cost reduction efforts. Award of the DD&C contract is expected in late 2014.

The National Defense Authorization Act (NDAA) for Fiscal Year 2014 adjusted the CVN-79 and follow ships cost cap to \$11,498 million to account for economic inflation and non-recurring engineering for incorporation of lead ship lessons learned and design changes to improve affordability. The Navy is committed to delivering CVN-79 within the cost cap by continuously implementing initiatives to reduce costs. The fiscal year 2015 President's budget rephases CVN-79 funding, resulting in the ship being delivered in mid-fiscal year 2023 vice late fiscal year 2022. The delay will have no impact on projected force structure, with USS *Nimitz* (CVN-68) not due to be inactivated until fiscal year 2025.

With more than half of the service life of the *Nimitz*-class still remaining, the RCOH continues as a key enabler for the enduring presence of the aircraft carrier Fleet. This year's budget request includes cost to complete the RCOH for USS *Abraham Lincoln* (CVN-72) partially restoring program funding removed during the fiscal year 2013 sequestration. It also includes funding for advance planning for defueling USS *George Washington* (CVN-73), work common to either inactivation or RCOH. However, the final decision on the future of CVN-73 will be made in the fiscal year 2016 President's budget request.

If sequestration spending levels remain in place in fiscal year 2016, CVN-73 would be inactivated. This path has a cost avoidance of approximately \$7 billion in the 2015–2019 FYDP, which includes the cost to overhaul and retain CVN-73 with her associated air wing and the logistics, manpower and training support costs. This permanent reduction in the aircraft carrier force is unavoidable if sequestration-level cuts are re-imposed, and will result in a corresponding decrease in operational availability to meet global demands and emergent crises. In this event, the Navy will be unable to meet historical combatant commander demands.

### *Submarines*

Submarines' stealth and ability to conduct sustained forward-deployed operations in anti-access/area-denial environments serve as force multipliers by providing high-quality intelligence, surveillance, and reconnaissance (ISR) as well as indication and warning of potential hostile action. In addition, attack submarines are effective in anti-surface warfare and undersea warfare in almost every environment, thus eliminating any safe-haven that an adversary might pursue with access-denial systems. As such, they represent a significant conventional deterrent. The Navy is mitigating an impending attack submarine force structure shortfall in the 2020s through three parallel efforts: continuing procurement of two *Virginia*-class submarines per year; reducing the construction span of *Virginia*-class submarines; and extending the service lives of selected attack submarines. While each of our attack submarines provides considerable strike capacity, our guided missile (SSGN) submarines provide substantially more strike capacity and a robust capability to covertly deploy Special Operations Force (SOF) personnel. Lastly, the Navy's 14 SSBNs provide the Nation with an around-the-clock, credible, modern and survivable sea-based strategic deterrent.

The fiscal year 2015 President's budget requests full-funding of two *Virginia*-class submarines and advanced procurement for the fiscal year 2016 and fiscal year 2017 vessels. The *Virginia*-class submarine program has delivered the last six ships on budget and ahead of schedule. The next ship, *North Dakota* (SSN-784), fully encompasses the Design for Affordability efforts begun in 2005, which include a completely redesigned bow section, and is expected to have the shortest construction span for a *Virginia*-class submarine.

The Under Secretary of Defense (Acquisition, Technology, and Logistics) notified Congress on March 26, 2014 of our intent to award the next 10-ship, MYP contract,

planned for April 2014. The contract continues the co-production of the *Virginia*-class submarines between General Dynamics Electric Boat and Huntington Ingalls Industries-Newport News Shipbuilding through fiscal year 2018.

Ballistic missile submarines, coupled with the TRIDENT II D-5 strategic weapons system, represent the most survivable leg of the Nation's strategic arsenal and provide the Nation's only assured nuclear response capability. SSBNs provide survivable nuclear strike capabilities to assure allies, deter potential adversaries, and, if needed, respond in kind. The Nuclear Posture Review completed in April 2010 determined that the U.S. would retain a nuclear triad under the New START including the 14 SSBNs currently in-service. Originally designed for a 30-year service life, the *Ohio*-class was extended to its limit at 42 years of operation. With the *Ohio*-class SSBNs being an average of 23.3 years old, the United States must continue development of the follow-on 12-ship *Ohio* Replacement as the current SSBNs' life cycles cannot be extended further. This is our top priority program within the Department of the Navy.

In December 2012, the Navy awarded a research and development contract for the *Ohio* Replacement. This contract focuses on meeting the program's performance requirements while reducing costs across design, production, and operations and sustainment. The Navy recently validated that its industry partners met or exceeded the cost-reduction targets established for fiscal year 2013. These reductions bring the Navy closer to its cost goals and serve as a positive start for what will be a long-term effort to minimize costs while delivering the required warfighting capability. The cost reduction efforts will continue throughout the design phase.

The fiscal year 2015 budget requests funding to continue development of the *Ohio* Replacement SSBN and ensures common missile compartment (CMC) efforts remain on track to support the United Kingdom's Successor Program's schedule. Given the need to recapitalize this aging strategic asset, coupled with the ongoing need to support Navy force structure, the Navy continues to pursue the means to resource construction of the next generation nuclear ballistic missile submarine in time to fulfill U.S. Strategic Command requirements.

The Navy's four guided missile submarines (SSGNs) provide significant warfighting capability but will be retired in the mid-2020s after 42 years of service. To mitigate the 60 percent reduction in undersea strike capacity when they retire, the Navy is exploring using the inherent modularity of the *Virginia*-class SSN and is designing a *Virginia* payload module (VPM) that will include four 87-inch wide missile tubes each capable of launching seven Tomahawk cruise missiles. This module provides greater than three times the payload capacity with less than 15 percent the cost increase to mitigate the large undersea strike capacity lost when SSGNs retire. The President's budget for fiscal year 2015 requests continued VPM research and development, providing an option to start procurement as part of the Block V contract scheduled for award in early fiscal year 2019.

#### *Large Surface Combatants*

Guided missile cruisers (CGs) and guided missile destroyers (DDGs) comprise our large surface combatant Fleet. When viewed as a whole, these ships fulfill broad mission requirements both independently and in conjunction with a strike group. The demands for increased capability and capacity in ballistic missile defense (BMD) and integrated air and missile defense (IAMD) continue to be a focal point. In order to meet the increased demand for BMD, the Navy is forward deploying four BMD capable DDGs to Rota, Spain. The USS *Donald Cook* (DDG-75) arrived in Rota in February 2014. One additional ship will arrive later this fiscal year, and the remaining two will arrive in fiscal year 2015.

The *Arleigh Burke*-class (DDG-51) program remains one of the Navy's most successful shipbuilding programs—62 ships are currently operating in the fleet. The fiscal year 2015 President's budget request includes funding to execute the third year of the MYP and procure two DDG-51 destroyers. The ships will incorporate IAMD and provide additional BMD capacity to the fleet when they deliver in the early fiscal year 2020s. The President's budget also includes a funding request to complete the construction of *John Finn* (DDG-113), *Ralph Johnson* (DDG-114), and *Rafael Peralta* (DDG-115) to restore program funding removed by the fiscal year 2013 sequestration.

Air and missile defense radar (AMDR) is the future multi-mission radar of the Navy's surface combatant fleet, which will meet the growing ballistic missile threat by improving radar sensitivity and enabling longer range detection for engagement of increasingly complex threats. In October 2013, the Navy awarded the contract for development of the AMDR, with options for up to nine low rate initial production (LRIP) units. This scalable radar is on track for installation on the second fiscal year 2016 DDG-51 hull to make it the first Flight III ship that will better support

joint battle space threat awareness and defense, including BMD, area air defense, and ship self-defense. The AMDR radar suite will be capable of providing simultaneous surveillance and engagement support for long range BMD and area defense. The program demonstrated during a March 2014 total ship design review that the Flight III design is on track to have adequate space, weight, power, and cooling service life margins. Engineering change proposal detail design efforts for the DDG Flight III design must continue in fiscal year 2015 to support introduction on one of the fiscal year 2016 ships.

The DDG-1000 *Zumwalt*-class guided missile destroyer will be an optimally crewed, multi-mission, surface combatant designed to provide long-range, precision, naval surface fire support to marines conducting littoral maneuver and subsequent operations ashore. In addition to the ship's two 155mm Advanced Gun Systems capable of engaging targets with the Long Range Land Attack Projectiles (LRLAP), the ship will be capable of conducting anti-submarine warfare (ASW), land attack and will provide valuable advancements in technology such as signature reduction (both acoustic and radar cross-section), active and passive self-defense systems, enhanced survivability features, and shipboard automation (in support of reduced manning). The DDG-1000 program concluded 15 of 15 successful LRLAP test firings in 2013, completing the guided flight test program. As a result, the LRLAP is on track for at-sea testing which is planned for fiscal year 2015. The program also completed a competition for a steel deckhouse for the DDG 1002. The competition for the deckhouse is one example of the Navy's ongoing initiatives to control program cost. The first ship of the DDG-1000 program, USS *Zumwalt*, will be christened this coming weekend, on April 12, and will enter the Fleet in 2016. The fiscal year 2015 budget requests funds to continue the DDG-1000 program.

#### *Small Surface Combatants*

The Littoral Combat Ship (LCS) enables the Navy to implement the DSG imperative to develop innovative, low-cost, and small-footprint approaches to achieve our security objectives. The modular, open systems architecture inherent in LCS's combat system allows for rapid integration of technological solutions that increase capability at reduced cost. The LCS complements our inherent blue water capability and fills warfighting gaps in the littorals and strategic choke points around the world. LCS design characteristics (speed, agility, shallow draft, payload capacity, reconfigurable mission spaces, air/water craft capabilities) combined with its core C4I, sensors, and weapons systems, allow LCS to bring unique strengths and capabilities to the mission.

The fiscal year 2015 President's budget includes funding for three LCSs. The reduction to the number of ships procured in fiscal year 2015 is the result of the tough choices required under reduced funding levels in fiscal year 2015 relative to the fiscal year 2014 plan. The reduction from four to three LCSs in fiscal year 2015 will require the Navy to extend the pricing for one block buy ship. The fiscal year 2015 President's budget request also includes funding to complete construction on LCS 5 through LCS 16 that was deferred due to sequestration in fiscal year 2013.

The LCS mission modules program continues its efforts to field capability incrementally as individual mission systems become available, rather than wait for all the mission systems needed for the end-state capability. Beginning in March 2014, the program commenced initial operational test and evaluation (IOT&E) on the surface warfare (SUW) mission packages (MP). The Remote Minehunting System (RMS) completed its reliability growth program this past year and continues to test well. RMS supports the mine countermeasure (MCM) MP which expects to begin IOT&E in 2015. The ASW MP is planning a preliminary design review in 2014 with IOT&E scheduled to begin in 2016. The LCS, with a MP, provides capability that is equal to or exceeds the current capability of the ships that it is replacing. The fiscal year 2015 budget requests funding for three modules (one MCM, two SUW).

The Navy successfully validated LCS's operational flexibility during a 10-month deployment to Southeast Asia with the manning concept of rotational crewing, shore-based training, and LCS maintenance strategies. This deployment will be followed by the USS *Fort Worth* (LCS-3) deployment in 2014. While the Navy continues to focus on the merits of LCS and the capabilities it brings to the fleet, the service also recognizes the importance of maintaining awareness of emerging threats and capabilities of our Nation's adversaries. As a result, the Navy is examining options to increase the lethality of our small surface combatant force. Specifically, the Navy is studying existing ship designs (including the LCS), a modified LCS, and a completely new ship design, including their estimated cost, to determine the most affordable method for improving the capability of this critical element of our force. Pending the results of this study (due in support of fiscal year 2016 budg-

et formulation), the Navy will restrict LCS contract actions within the first 32 ships of the class.

#### *Amphibious Ships*

History demonstrates that when fiscal austerity reduces the size of available forces, the Nation must rely on the persistent presence and power projection capabilities of the Navy and Marine Corps. Ensuring the Nation retains its critical amphibious capability remains a top Department of the Navy priority. The Marine Corps remains first and foremost a naval service, operating in close partnership with the U.S. Navy. Together, the two naval services leverage the seas, not only to protect the vast global commons, but also to project our national power and influence events ashore.

The future security environment requires a robust capability to operate from the sea and maneuver over land to positions of advantage. A core capability of expeditionary forces is the ability to project forces ashore from amphibious platforms and to maneuver once ashore. Their flexibility and adaptability provide unmatched capability to combatant commanders, and their demand for these forces always exceeds our existing capacity.

Amphibious ships operate forward to support allies, respond to crises, deter potential adversaries, and provide the Nation's best means of projecting sustainable power ashore; they also provide an excellent means for providing humanitarian assistance and disaster relief. Amphibious forces comprised of sailors, marines, ships, aircraft, and surface connectors provide the ability to rapidly and decisively respond to global crises without a permanent footprint ashore that would place unnecessary political or logistical burdens upon our allies or potential partners. There are two main drivers of the amphibious ship requirement: maintaining the persistent forward presence, which enables both engagement and crisis response, and delivering the assault echelons of up to two Marine Expeditionary Brigades (MEB) for joint forcible entry operations.

The Chief of Naval Operations and Commandant of the Marine Corps have determined that the force structure for amphibious lift requirements is 38 amphibious ships. Balancing the total naval force structure requirements against fiscal projections imposes risk on meeting this requirement. Based on the footprint of a 2.0 MEB assault echelon force, a minimum of 30 operationally available ships are necessary to provide a force made up of 10 amphibious assault ships (LHD/LHA), 10 amphibious transport docks (LPD), and 10 dock landing ships (LSD). Planning factors call for a force of 33 ships to achieve this availability, and this will be achieved in total in fiscal year 2018, and with the required mix (11/11/11) in fiscal year 2024 with delivery of LHA-8. At the end of fiscal year 2015, the amphibious force structure will stand at 30 ships, which includes 9 LHD/LHAs, 9 LPDs, and 12 LSDs.

LHA(R) class ships are flexible, multi-mission platforms with capabilities that span the range of military operations—from forward deployed crisis response to forcible entry operations. These ships will provide the modern replacements for the remaining LHA-1 *Tarawa*-class ship and the aging LHD-1 *Wasp*-class ships as they begin decommissioning in the late 2020s. *America* (LHA-6) and *Tripoli* (LHA-7) are optimized for aviation capability in lieu of a well deck and will deliver in April 2014 and 2018, respectively. LHA-8, the first Flight 1 ship, will have a well deck to increase operational flexibility and a smaller island that increases flight deck space to retain aviation capability. It will be funded in fiscal year 2017 and will deliver in fiscal year 2024. The Navy expanded the early industry involvement efforts for the LHA-8 design and initiated a phased approach to the design for affordability of amphibious ships. The increased funding in fiscal year 2014 will fund these affordability efforts that foster an interactive competition with industry partners in developing a more affordable, producible detail design and build strategy, and drive towards more affordable ships. Funding for LHA(R) planning, testing, outfitting, and post-delivery is included in the President's budget.

The *San Antonio*-class (LPD-17) provides the ability to embark, transport control, insert, sustain, and extract elements of a Marine Air-Ground Task Force (MAGTF) and supporting forces by helicopters, tilt rotor aircraft, landing craft, and amphibious vehicles. The Navy accepted delivery of USS *Somerset* (LPD-25) in October 2013, the 9th of 11 ships. The remaining two ships are under construction and will deliver in spring 2016 and summer 2017, respectively. The fiscal year 2015 President's budget requests funding for cost to complete, outfitting, post-delivery, and program close-out costs.

LX(R) is the replacement program for the landing ship dock, LSD-41 and LSD-49 classes, which will begin reaching their estimated service life in the mid-2020s. The Navy will leverage LX(R)'s analysis of alternatives (AoA), which will conclude in fiscal year 2014, to determine the ship's key performance parameters. The pro-

gram is anticipated to begin technology development in early fiscal year 2015. Throughout development, affordability will be a key focus for this ship class. Industry will be involved in identifying cost drivers on this class of ship. Advanced procurement funding in fiscal year 2019 is planned with the lead LX(R) class ship planned in fiscal year 2020. The lead LX(R) will deliver in time for LSD-43's retirement in fiscal year 2027. The Navy plans to maintain 11 deployable LSDs in the Active Force until LX(R) delivers by rotating three LSDs to complete phased modernizations beginning in fiscal year 2016. This will extend USS *Whidbey Island* (LSD-41) and USS *Germantown* (LSD-42) (with mid-life complete) to 45 operational years of service. USS *Tortuga* (LSD-46) will complete a mid-life availability so as to achieve the desired 40 year operational service. This plan mitigates presence shortfalls and 2.0 MEB assault echelon shipping requirements.

#### *Surface Connectors*

The Navy-Marine Corps team will continue its investment in future surface connectors. These connectors will provide future expeditionary force commanders greater flexibility to operate in contested environments. The President's budget includes the ship-to-shore connector (SSC) air-cushioned vehicles and the surface connector replacement (SC(X)(R)) program that will replace the aging landing craft utilities. These platforms are essential in connecting the combat power and logistical sustainment that the sea base provides, with the forces that are operating in the littorals and inland for all missions. We will continue to explore future connector options that will increase our ability to exploit the sea as maneuver space by increasing range, speed, and capacity.

#### *Auxiliary Ships*

Support vessels such as the mobile landing platform (MLP) and the joint high speed vessel (JHSV) provide additional flexibility to the combatant commanders. The USNS *Montford Point* (T-MLP-1) and USNS *John Glenn* (MLP-2) ships are designed to support the Maritime Prepositioning Forces, enabling at-sea transfer of vehicles from cargo ships to facilitate the delivery of these vehicles, equipment, personnel and supplies between the sea and restricted access locations ashore. MLP-1 delivered, and with the installation of the core capability set (CCS) completing in spring 2014, it will continue with its integrated testing and evaluation phase throughout the summer and fall to explore further use beyond MPF to facilitate expeditionary operations. The shipyard's delivery of MLP-2 occurred in March 2014; the ship will have its CCS installation completed by early fiscal year 2015. Both MLP-1 and MLP-2 were delivered by the shipyard on cost and on schedule. MLP afloat forward staging base (AFSB) variant utilizes the MLP base ship, but is outfitted with an AFSB capability vice the CCS. The MLP AFSB variant will retain sealift capabilities inherent to the baseline MLP with added vertical lift capability to support sealift and other missions in response to combatant commanders' requirements. In the past, the Navy provided fleet assets to address the AFSB demand. In order to avoid diverting a fleet asset to fulfill this request, the Department of the Navy converted the USS *Ponce* (AFSB-1) to provide an interim AFSB capability. Three MLP AFSB variants are currently planned. *Lewis B. Puller* MLP-3, the first AFSB variant, is under construction and will deliver in late 2015, in time to replace USS *Ponce* by fiscal year 2017. The Navy plans to award MLP-4 AFSB and MLP-5 AFSB in fiscal year 2014 and fiscal year 2017, respectively.

The JHSV provides a high-speed, shallow-draft alternative to moving personnel and materiel within and between the operating areas, and to supporting security cooperation and engagement missions. In fiscal year 2013, the 10th and final JHSV was awarded and USNS *Spearhead* (JHSV-1) and USNS *Choctaw County* (JHSV-2) delivered. USNS *Millinocket* (JHSV-3) delivered in March 2014. The Navy is exploring opportunities to further enhance JHSV's operational profile to support/enhance warfighter requirements such as Special Operations support; maritime interdiction operations; submarine rescue; and intelligence, surveillance, and reconnaissance missions. The fiscal year 2015 President's budget requests program support and close out costs, and cost to complete funding for *Brunswick* (JHSV-6), *Yuma* (JHSV-8), *Bismarck* (JHSV-9) and *Burlington* (JHSV-10) in order to restore funding reduced by fiscal year 2013 sequestration.

Combat logistics support ships fulfill the vital role of providing underway replenishment of fuel, food, repair parts, ammunition, and equipment to forward deployed ships and embarked aircraft, to enable them to operate for extended periods of time at sea. Combat logistic support ships consist of T-AOE fast support ships, T-AKE auxiliary dry cargo ships, and T-AO fleet replenishment oilers. The T-AO and T-AKE ships serve as shuttle ships between resupply ports and their customer ships,



while the T-AOE ships serve as station ships, accompanying and staying on-station with a carrier strike group to provide fuel as required to customer ships.

Research and development efforts continue as the Navy matures its concept for the replacement of the *Kaiser*-class (T-AO-187) of fleet replenishment oilers. The new replacement oilers, currently designated as T-AO(X), will be double-hulled and meet Oil Pollution Act 1990 and International Marine Pollution Regulations. Similar to the LHA(R) and LX(R) programs, T-AO(X) benefitted from early industry engagement in terms of cost/capability trade-off studies that will help to refine the ship specifications. The Navy's budget request plans the lead ship in 2016 with serial production beginning in 2018. The total ship quantity is expected to be 17 ships.

#### *Affordability and the Shipbuilding Industrial Base*

The interconnectivity of today's shipbuilding industry with its supplier and vendors is complex, and there is a cascading effect that today's decisions can have near-term as well as years into the future. A healthy design and production industrial base is critical to achieving the Department of the Navy's priorities and fulfilling the Navy's needs going forward. Perturbations in naval ship design and construction plans are significant because of the long-lead time, specialized skills, and extent of integration needed to build military ships. The complex configuration and size of naval vessels result in design times that range from 2 to 7 or more years, and construction schedules that can span up to 9 years. Individual ships cost from hundreds of millions to several billions of dollars, making each one a significant fraction of not only the Navy's shipbuilding budget, but also industry's workload and regional employment numbers. Consequently, the timing of ship procurements is a critical matter to the health and sustainment of U.S. shipbuilding and combat system industries.

#### *Stability and predictability matter*

It matters to the Navy, to industry, to their workforce, to their families and to their communities. Our Nation's defense industrial workers are skilled, experienced, and innovative and they can't be easily replaced. The Department must provide stability and predictability to the industrial base to maintain our ability to continue to build the future Fleet.

#### *Affordability and quality matter*

Together with our industry partners, we have made significant progress in the past few years improving both measures. The quality of our ships improved as evidenced by the reduction in the number of critical deficiencies issued by the Board of Inspection and Survey during acceptance trials. The Department of the Navy is also focusing on affordability efforts across all phases of acquisition. For ships under contract, we have held the line on minimizing change. We have demanded discipline in waiting until designs are nearly complete before starting production. We have used competition to reduce costs. With the assistance of Congress, we have employed MYP and block buy contracts to provide stability, obtain economic order quantity discounts, and facilitate learning, which yielded cost savings. We are driving affordability earlier and earlier into the life cycle: interacting with the users and sponsors to better understand the requirements and how they drive cost; and engaging with our industry partners to better understand the trade-offs and inflection points between performance and cost. We are setting affordability cost targets at both the procurement and operating and support levels, to ensure that we do not optimize one at the expense of the other. We are looking internally as well to maximize our buying power and eliminate less value added processes and oversight.

Our ability to mitigate the adverse impacts on the shipbuilding industrial base from constrained resources has its limits. At the reduced BCA levels we are facing starting in fiscal year 2016, Navy funding of the *Ohio* Replacement will significantly impact the industrial base and the future ship mix due to reduced procurement of other ship classes. The result will be increased risk in the Navy's ability to support the DSG, and inevitably reductions in the shipbuilding and combat system industrial base, with further long-term impacts on platform affordability and force size.

#### *Surface Ship Modernization*

The President's budget request for fiscal year 2015 proposes a CG/LSD Phased Modernization Plan that will provide the means to retain the best Air Defense Commander and Marine expeditionary lift capabilities through the 2030s and CGs into the 2040s. This plan paces the threat through the installation of the latest technological advances in combat systems and engineering in CGs 63-73 and LSDs 41, 42 and 46. As a result, these ships remain relevant and viable throughout their entire service life, enabling the Navy to sustain dominant force structure. To date the Navy has modernized CGs-52-58 with the Advanced Capability Build (ACB) 08

Combat System as well as substantial hull, mechanical, and electrical (HM&E) upgrades, and has nearly completed modernization on CGs 59–62 with the improved ACB 12. These investments have allowed the first 11 ships of the *Ticonderoga*-class to remain the world's premier air defense commander platform, fully capable of integrating into the carrier strike group construct or operating independently in support of combatant commander demands.

The Navy has developed an affordable framework to retain the remaining 11 cruisers (CG–63–73) in the active fleet, through induction into a phased modernization period starting in fiscal year 2015. The Navy will begin the phased modernization of these ships with material assessments, detailed availability planning, and material procurements. Subsequently, the Navy will perform HM&E upgrades, critical structural repairs, and extensive corrective and condition-based maintenance. The final phase will include combat system installation, integration, and testing. This will occur concurrently with re-manning the ship, immediately preceding restoration to the Fleet. By combat systems modernization occurring immediately prior to restoration, these ships will have the latest practicable combat systems upgrades while mitigating the risk and cost of technical obsolescence. The Navy intends to draw down the manpower for these CGs during their modernization, thus greatly reducing the cruiser costs during the period. The current plan is to complete modernization of each cruiser on a schedule that sustains 11 deployable air defense commander CGs (1 per carrier strike group) into the 2040s.

Similarly, the Navy plans to perform the final *Whidbey Island*-class modernization through this phased modernization plan. This plan modernizes LSD–46, and installs additional structural, engineering, and combat systems modifications on LSDs–41 and –42. As a result of the modernization investment, the Navy will extend the operational service life of these ships, during which time they will remain relevant and reliable until they retire 44–51 years after commissioning.

The phased modernization plan for CGs and LSDs allows the Navy to garner 172 additional operational ship years above the permanent force structure cuts required to meet the limits imposed by the BCA, and precludes the Navy from having to increase our overall end strength by about 3,700 people, which would otherwise be required to fill critical shortfalls in our training pipelines and fleet manning. Phased modernization also greatly benefits the industrial base by providing a steady, predictable work flow which increases production efficiency and lowers cost to the Navy. The HM&E-centric maintenance and modernization availabilities can be scheduled at times when there is a shortage of work in the various homeports, thereby leveling the work load and effectively utilizing industrial facilities, such as drydocks and piers. Without the pressure of meeting near-term fleet deployment schedules, the work can be planned in the most economical and efficient manner, including reducing the need for costly overtime rates and hiring subcontractors to supplement shipyard workforce. An additional advantage of the phased modernization approach is that it provides an option to restore the ships to service in the event of a shift in the strategic environment in much less time than would be required to construct new ships.

The fiscal year 2015 President's budget request also includes funding for the modernization of three destroyers. To counter emerging threats, this investment is critical to sustain combat effectiveness and to achieve the full expected service lives of the Aegis fleet. The Navy is proposing a two-pronged modernization plan to maintain relevance throughout the destroyer fleet: continue to modernize the Flight I/II destroyers, and modernize the Flight IIA destroyers beginning in fiscal year 2017. This approach maximizes return on investment by modernizing the ships close to their midlife, and increases BMD capacity by installing BMD on Flight IIA destroyers. The destroyer modernization program includes HM&E upgrades as well as advances in warfighting capability and open architecture combat systems. This renovation reduces total ownership costs and expands mission capability for current and future combat capabilities.

#### SUMMARY

The Department's shipbuilding plan continues to build toward the 306-ship force requirement that is defined by the Force Structure Assessment. The Department of the Navy continues to instill affordability, stability, and capacity into the shipbuilding plans and to advance capabilities to become a more agile, lethal and flexible force to address the challenges and opportunities facing the Nation. The request for fiscal year 2015 includes two *Virginia*-class attack submarines, two DDG–51 *Arleigh Burke*-class destroyers, and three Littoral Combat Ships. These investments are a critical part of our long-range plan designed to deliver the fleet necessary to meet the Department of the Navy's missions under the Defense Strategic Guidance.

Budget uncertainties may slow progress towards our goals, but the tenets which guide our decisions remain firm. The Navy and Marine Corps stand ready to answer the call of the Nation. We thank you for your continued support of the Navy and Marine Corps and request your approval of the fiscal year 2015 President's budget request for the Department of the Navy's program.

Senator REED. Thank you very much, Mr. Secretary.

I've just been informed that there's a possible procedural vote at 3 p.m., so we will try to work around that in terms of getting our questions to you and your responses.

Let me begin. We've looked over the last several years at a number of shipbuilding programs, obviously those that have cost overrun problems or quality problems. One program, not the only one, but one that we've paid attention to, is the LPD-17. Last year, Secretary Stackley, you indicated that you saw some real progress in terms of cost control and quality increases in that program. Could you elaborate on that, and are we continuing in that direction?

Mr. STACKLEY. Yes, sir. I'll start this answer and I'll turn it over the back half to Admiral Hilarides, who is responsible for the Supervisor of Shipbuilding (SUPSHIPS).

The LPD-17 has remained very stable in terms of cost performance as we complete the last handful of ships. The last two ships delivered to the Navy, LPD-25 and -26, very high quality, very stable, predictable cost performance. In fact, LPD-26 delivered without starred card deficiencies, where a starred card is the highest level deficiency, and to achieve a zero starred card level at acceptance is extraordinary.

The additional challenge that we've been able to control is completing the class. As we complete production, we've been able to keep costs under control and not see a tail-up at the end of production, which is fairly typical of any long-term production run. Stable, mature designs, fixed price contracts, close collaboration between the Navy and the shipbuilder to keep costs under control, quality at delivery.

I think Admiral Hilarides, I'd like him to expand on the efforts that Naval Sea Systems Command (NAVSEA) with the Supervisor have put in place to ensure we stay on top of the quality of ships.

Senator REED. Admiral Hilarides?

Admiral HILARIDES. Yes, sir. Senator, as Secretary Stackley said, the finish quality of the late LPD-17s has been as good as we've seen across the shipbuilding portfolio. A lot of hard work by the shipbuilder. My supervisor is fully integrated into that shipbuilding team to go help them over the initial quality problems we had with those ships, and are bringing to bear the engineering and contract oversight resources to go make that program perform well, on cost, as the quality has improved.

That quality performance, which has continued to improve across the LPD-17 class, has actually begun to show on the LHA class as well. *America's* in-serve is also very successful, fit and finish of that ship is extremely good and better than any of the previous ones we've seen in the last 10 or 15 years. The commitment of the supervisor, working closely with the shipyard, has borne fruit and quality performance is dramatically better.

Senator REED. May I ask you a related question? In one of our previous hearings in 2013, one of the areas of attention—particularly to the attention of Vice Admiral Kevin M. McCoy, USN, the

Commander of Naval Sea Systems Command at that time—was increasing the skill and the ability of the supervisor and his staff, SUPSHIPS, because they are literally your people on the docks and in the construction areas. Can you talk about if we are making continued progress to raise the quality and the training and the effectiveness of the SUPSHIPS personnel?

Admiral HILARIDES. Yes, Senator. We had made a modest increase in the size of that staff and that increase, although it was slowed by the events, the hiring freeze, and other things that occurred in 2013, that supervisor is now approaching being fully manned.

Our commitment to train the engineering resources, that is to push the engineering decisions down to the waterfront, has borne fruit. That requires that training that you talked about and the full engagement of my technical staff in Washington with the technical folks on the deckplate. That training program is going well. Still plenty of work to do, but the teamwork that has been established, the improvements in quality and the improvements in schedule adherence are really showing that that investment has turned out very well. Admiral McCoy is on the right track.

Senator REED. Just quickly, you're satisfied you have the sufficient number of personnel and that they are adequately trained and they also have the cooperation and collaboration with the contractors to get the job done?

Admiral HILARIDES. Yes, sir, I am.

Senator REED. Mr. Secretary?

Mr. STACKLEY. I'm going to just expand on that a bit.

Senator REED. Please.

Mr. STACKLEY. That's been a long-term effort to get that work force in place. All of our manpower accounts are under great pressure right now. In all the budget deliberations in terms of the impacts of budget drawdowns, we are having to hold our ground to not go in reverse in terms of what we knew we had to do and did to get the eyes on site at SUPSHIPS.

Senator REED. One of my impressions is that this, the value of these individuals, wasn't truly appreciated until we had the overruns and the inefficiencies and the problems, and then we recognized we have to have these people on the waterfront with the ability and training. The pressure between putting people on the waterfront supervising contracts and putting people in the air flying aircraft or undersea driving ships is acute when they're building; is that fair?

Admiral HILARIDES. That's very fair, sir.

Senator REED. Quickly, the ORP. There is an implication from the fallout of both sequestration and the BCA on the NNSA, which plays a role in the development of the nuclear power plant. There's the suggestion that there could be as much as a 6-month delay because of issues involving the nuclear power plant. Can you provide us any insights into this potential delay, any way we can resolve it, and does this require attention—it does require attention of the Navy, but also from the NNSA?

Mr. STACKLEY. Yes, sir. The total shortfall that we are struggling with right now is about \$150 million associated with NNSA. The 6-month impact—that's the assessment of Admiral John M. Rich-

ardson, USN, Director of the Naval Nuclear Propulsion Program, in terms of what that shortfall as it hits his requirements for development of the reactor plant for the ORP, that's upfront. A 6-month delay upfront you cannot recover downstream.

We're trying to draw the line here on this issue, working with NNSA, making Congress aware. Inside DOD, it has the high-level attention from the Nuclear Council inside of DOD. But we don't have a solution today. Today we're staring at this coming our way. We do not have a solution. Our ability to try to mitigate that 6-month potential impact if the funding doesn't arrive is going to be very limited, and what that places at risk is the follow-on schedule for the ORP.

Frankly, we're sitting here in 2014 deliberating on the 2015 budget for a boat that is required to be on patrol in 2031. This is simply the first stage of what will be a year-upon-year effort to try to keep that program's funding whole.

Senator REED. This is a key factor in keeping the cost of the program well within the envelope you've laid out?

Mr. STACKLEY. Yes, sir.

Senator REED. Thank you very much.

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

I thank the witnesses. Secretary Stackley, the cost of the *Gerald R. Ford* was \$12 billion, is that correct?

Mr. STACKLEY. Actually, sir, the cost cap, the budget, and the estimate at completion are all \$12.8 billion.

Senator MCCAIN. \$12.8 billion. Is that a \$2.8 billion cost overrun?

Mr. STACKLEY. The cost cap that was established in 2006 for the *Gerald R. Ford* was \$10.5 billion in 2006 dollars.

Senator MCCAIN. So it's a \$2.3 billion cost overrun?

Mr. STACKLEY. Yes, sir.

Senator MCCAIN. Have we ever figured out what caused all of that?

Mr. STACKLEY. Yes, sir, we can give you a very detailed breakdown.

Senator MCCAIN. For the record you could provide us with a readout as to what caused that.

[The information referred to follows:]

Total cost growth on CVN-78 since contract award in 2008 is approximately \$2.4 billion (22.9 percent). The causes of cost growth can be attributed to the ship design costing more than the Department of Defense estimated (\$738 million), the shipbuilder underestimating the cost of components (\$336 million), unforeseen issues with new design features inherent in a first-of-class ship as well as late delivery of components to support the ship construction schedule (\$334 million), and increases in design and production of developmental technology for CVN-78 (\$955 million).

The lead ship design was more costly than the Navy anticipated in 2008. The scope of the design was underestimated and resulted in \$738 million of cost growth. Design is largely complete and there is no additional risk to the funding for design efforts.

When the ship design was immature, the shipbuilder, Huntington Ingalls Industries, underestimated quantities and/or the unit costs of particular items. For many components, the shipbuilder overestimated the success of reducing procurement costs through negotiation with vendors. Lastly, escalation in the prices of commodities, particularly steel, exceeded the projections made at contract award. Material purchases for the ship are complete so the cost growth of \$336 million remains unchanged.

Much of the variances in shipbuilder performance can be attributed to unforeseen issues encountered with the new design features inherent in the first-of-class ship. As examples, thinner decking incorporated into the design to reduce weight proved to be significantly difficult to weld while maintaining critical tolerances for alignment and deck fairness. Similarly, large inconel forgings such as sea chests, exhibited cracking, resulting in rework and disruption to the construction schedule. The startup of new processes for advanced coating systems have required more labor hours than initially expected. Also, late deliveries of contractor furnished equipment impacted production, causing unit pre-outfit levels to fall well below standard. For example, delays in delivery of a large number of unique critical system valves have proven particularly disruptive, causing many compartments to be temporarily outfitted with spool pieces pending receipt of the proper valves. In the extreme case, the CVN-78 erection schedule was disrupted to accommodate the late delivery of the ship's air conditioning plants. As the ship is now entering the test phase of the program, this cost growth is not expected to change (\$334 million).

Finally, the Navy experienced cost growth in developmental technology incorporated into CVN-78. Examples of these systems include the electromagnetic aircraft launch system, the advanced arresting gear, dual band radar, and integration of smaller systems into the combat system. These systems have been procured and largely installed in CVN-78 so the \$955 million of cost growth should not increase.

CVN-78 is entering the critical shipboard test phase of the program. This is the single area of risk that could affect the cost cap.

Follow-on carriers of the *Ford*-class are not expected to experience the same cost challenges faced by CVN-78 since they will not be affected by the first-of-class issues facing the lead ship. In addition to working with the shipbuilder to incorporate lessons learned from CVN-78 design and construction, joint Government shipbuilder integrated product teams have been established to aggressively pursue further cost reduction goals for CVN-79 in the areas of material, labor, and design.

Senator MCCAIN. Now, what's going to be the cost of the *John F. Kennedy*?

Mr. STACKLEY. The *John F. Kennedy*'s budget and cost cap are set at \$11.498 billion.

Senator MCCAIN. Are we going to make that number?

Mr. STACKLEY. Yes, sir. We are totally committed to doing better than that number.

Senator MCCAIN. The *Enterprise*?

Mr. STACKLEY. The *Enterprise*, she's just starting to show in the budget, so right now all we have is the cost cap associated with the *Enterprise*, which is equal to the *John F. Kennedy*'s plus inflation.

Senator MCCAIN. I'd appreciate very much in writing exactly what took place that caused this horrendous overrun of the *Gerald R. Ford*.

Mr. STACKLEY. We'll give you a detailed breakout, Senator.

Senator MCCAIN. We just can't have that. It's not acceptable. Also, how, when it's the only game in town, we are able to keep costs under control when there is clearly no competition nor any prospect of it.

Secretary Stackley, are you familiar with the GAO report released just recently? The title of it is: "Additional Testing and Improved Weight Management Needed Prior to Further Investments." According to GAO: "Several Seventh Fleet officials told us they thought the LCS in general might be better suited to operations in the smaller Persian Gulf. The Commander of the U.S. Pacific Command (PACOM), Admiral Samuel J. Locklear, III, USN, said that the LCS is only partially effective in fulfilling his operational requirements."

Have you seen that GAO report?

Mr. STACKLEY. Yes, I have, sir.

Senator MCCAIN. Have you had a chance to examine it and have a response to it?

Mr. STACKLEY. Yes, sir. I've gone through it in fairly good detail and each issue that they've brought up we've gotten down to the base of to determine is it correct, is it incomplete information they're working with, is it an issue that we're already working on.

In specific, you mentioned two items in particular. Referring to Seventh Fleet officials and whether the LCS is better suited to the Gulf or to the Pacific, I can't trace that down because I don't know who the Seventh Fleet officials were. My dialogue has been with the Commander, Naval Surface Forces, in terms of the LCS and its applicability to all regions where it should be called upon to operate in, and there has been no reluctance, no concern in that regard.

Now, that said——

Senator MCCAIN. Could I just interrupt——

Mr. STACKLEY. Yes, sir.

Senator MCCAIN.—if you don't mind. Admiral Locklear told the committee that the LCS is only partially effective in fulfilling his operational requirements. That wasn't an anonymous official.

Mr. STACKLEY. In terms of Admiral Locklear's testimony, I watched and reviewed that and, frankly, his comments I will say are very similar to Commander, U.S. Fleet Forces Command. When they look at our naval force structure and they consider the fact that we are below 300 ships today, they are concerned with the balance between SSCs, large surface combatants, and submarines. They have not addressed a shortfall in terms of the LCS requirements. Their concern has been with the overall force structure.

Senator MCCAIN. Why do you think, then, that the Secretary of Defense directed the Secretary of the Navy (SECNAV) to reduce the buy of LCS?

Mr. STACKLEY. The specific direction that we received was to not put any additional ships on contract beyond 32 until we have completed a study to take a look at increasing the lethality of our SSCs and basically return with the results of testing on the program. We've been directed to look at three different alternatives: new ship design, existing alternative ships, and potentially modifying the LCS.

Senator MCCAIN. Modifying the LCS, after 12 years.

By the way, I read the Secretary of Defense's full statement. I think you left out a couple of phrases in there. Maybe my staff has his full statement, but he said a lot more than that in ordering the reduction in the numbers acquisition.

The GAO report basically says we haven't received the mission modules completed and a couple of them won't be done for several years; is that correct?

Mr. STACKLEY. We have three mission packages that are in testing right now. The surface warfare mission package, the first increment completes her testing this month and it's in very solid shape. The second mission package is mine countermeasures mission package, which starts her developmental testing this year, going into operational testing next year. The elements of the mine countermeasure mission——

Senator MCCAIN. Operational that next year——

Mr. STACKLEY. Yes, sir.

Senator MCCAIN.—with completion of that testing when?

Mr. STACKLEY. August 2015.

The individual elements of the mine——

Senator MCCAIN. The third?

Mr. STACKLEY. I'm sorry. The third mission package is the anti-submarine warfare mission package, which goes into operational testing in June 2016.

Senator MCCAIN. To be completed?

Mr. STACKLEY. It's about a 1-month period for operational testing. It would be the summer of 2016.

Senator MCCAIN. It was, I believe, 2002 when we embarked on the effort to acquire a LCS?

Mr. STACKLEY. 2005 is when the first two ships were awarded. 2002 would have been when the design and developments were started.

Senator MCCAIN. I see, so now we're looking at 2016 or 2017 by the time the ship is operationally capable?

Mr. STACKLEY. The first ships are going to be deploying with the surface warfare mission package. *Freedom* went with the surface warfare mission package. *Fort Worth* deploys later this year with a surface warfare mission package. Frankly, I will tell you that the priority is placed on the mine countermeasures mission package because that's where we have the greatest warfighting capability gap, and so we're doing everything we can to ensure that that operational testing stays on track.

Senator MCCAIN. Again, Secretary Stackley, I appreciate your testimony, but I would like to quote you what the Secretary of Defense said: "The LCS was designed to perform certain missions, such as minesweeping and antisubmarine warfare, in a relatively permissive environment. But we need to closely examine whether the LCS has the independent protection and firepower to operate and survive against a more advanced military adversary and emerging new technologies, especially in the Asia-Pacific region."

I think that puts a little bit different slant on, frankly, why the Secretary decided to reduce the buy of the LCS, because we still don't know if it is capable in a nonpermissive environment, relatively permissive environment. That's what the Secretary of Defense says.

I think your answer, frankly, was a little incomplete to my question.

Mr. STACKLEY. Can I provide a more complete response, sir?

Senator MCCAIN. Please.

Mr. STACKLEY. Yes, sir. The LCS is designed for what's referred to as level 1 survivability, and it has a self-defense capability that gives it the ability to defend against certain air threats. The Secretary of Defense's concern is that when you look at the increasing threat environment in the Pacific, we need to take a look at raising that level of lethality on that platform. That's exactly what we're going about doing.

Senator MCCAIN. Again, I say with respect, he says: "We must direct future shipbuilding resources toward platforms that can operate in every region and along the full spectrum of conflict"—again bringing into question whether the LCS is capable of performing all of those missions.



But my time has long expired. I thank you, Mr. Chairman.

Senator REED. Thank you, Senator McCain.

We have a vote pending now. We're more than halfway through it. There's two basic options, a short recess where we all vote or I could recognize Senator King and then Senator Sessions could follow. Do you have any preference? Senator King?

Senator KING. I suggest we have a brief recess and we all go.

Senator REED. A recess and then we will—with the wisdom of the panel, we will recess briefly and return, and ask you gentlemen to stay. The subcommittee stands in recess until the call of the Chair.

[Recess from 3:08 p.m. to 3:22 p.m.]

Senator REED. I'd like to call the hearing to order again and recognize Senator Wicker.

Senator WICKER. Thank you, Mr. Chairman.

Secretary Stackley, let me ask you about the LPD-26. The subcommittee has had numerous hearings in the past on the performance and quality of ships entering our Navy fleet. As the USS *John P. Murtha* nears completion and delivery, what is your assessment today of the quality and performance of the LPD-17 class ship?

Mr. STACKLEY. Yes, sir. Thanks for the question. It's consistent with my earlier response with Senator Reed that the quality of the LPD has steadily improved to the point that the recently delivered ships are of the highest quality. The focus right now is pushing that quality control upstream in the process, because the delivered quality is good, the practices are there; the more we can push that upstream, the better the cost will improve along with that.

Senator WICKER. That's good to hear.

Let me then ask you about requirements. Are you aware of the letter regarding amphibious ship shortfalls that was signed by a group of 20 retired Marine Corps generals, including former Commandant of the Marine Corps General James T. Conway and former Commander of the Central Command General James N. Mattis?

Mr. STACKLEY. Yes, sir, I am.

Senator WICKER. Consistent with that letter from our retired Marine Corps generals, Commandant James F. Amos and CNO Jonathan W. Greenert, testified last month that they would need 50-plus amphibious ships to meet the current needs of the combatant commanders. Now, the LPD-17 program was originally planned for 12 warships, but was reduced to 11 vessels due to budget constraints.

Do we need that 12th LPD to support your mission?

Mr. STACKLEY. Let me walk you through this, sir. The total lift requirement for the amphibious force is a total of 38 amphibious ships. About 4 years ago the CNO and the Commandant agreed that they would accept a shortfall to the 38 amphibious ships, based on budget constraints, and the risk that's associated with it, and that we would build to a 33-ship amphibious force, 11 big decks, 11 LPD-17s, and 11 LSD-41/49 or their replacement.

So the unconstrained requirement for two marine expeditionary brigade lift is 38 ships. The budget-constrained requirement is 33 ships. Today we're at 30 ships, and we get back up to 33 ships total

in about the 2018 timeframe, although we don't get to the mix of 11-11-11 until 2024.

Senator WICKER. Okay. What risk are we accepting based on those numbers?

Mr. STACKLEY. The risk between the 38-ship and the 33-ship number, what that means is that in a major combat operation that's involving the amphibious force, some amount of its gear—and it would be prioritized—would have to be delivered in a follow-on echelon. It would not be there with the immediate assault force. That would become a matter of prioritizing which gear is in the assault echelon and which gear comes behind in the follow-on echelon.

Senator WICKER. How serious is that?

Mr. STACKLEY. I can't speak for the Commandant. I would say that if it was very serious he wouldn't have agreed to the 33-ship substitute for the 38-ship requirement. It's of concern, but the Commandant would not have signed up for something that he couldn't ultimately accept. I think it was a matter of just recognizing where we are with the budget and drawing a hard line so that it doesn't continue to erode regarding the total amphibious force.

Senator WICKER. What do you say to these 20 distinguished Marine Corps generals who signed the letter concerning the amphibious ship shortfalls?

Mr. STACKLEY. Sir, I have to point towards a letter that was co-signed by the Commandant and the CNO in terms of the requirement that's handed to the Department of the Navy to fulfill. We have a longstanding requirement for a total Marine Corps lift. We're short on that. The Commandant and the CNO agreed to a lesser number with acceptable risk. We're building to that.

I'll go back to the comments that the CNO and the Commandant both made: We need more ships. The CNO's comment about a 450-ship force, that would be the total number of ships to answer all the demands by the combatant commanders. The notion of a 50-ship amphibious ship force, I think that's less about the requirement to support major combat operations and it's more in recognition of the fact that the versatility of those amphibious ships makes them a workhorse in the fleet. There's always going to be high demand for that type of capability.

Senator WICKER. Thank you.

Thank you, Mr. Chairman.

Senator REED. Thank you, Senator Wicker.

I will take my second round now until my colleagues rejoin us.

Admiral Mulloy—and this was alluded to in Senator McCain's comments—for years the goal in ship size for the fleet, 313 ships, last year adjusted down to 306 ships. This year the Navy has changed the definition of a "ship" which will be included in the goal. Can you briefly describe what you're counting, what you're not counting, and how does this affect the 306-ship goal?

Admiral MULLOY. Yes, sir. Really there are two separate items here. The 306 goal is based upon what's called a force structure assessment, which is actually made of 9 separate parts, which we total to 306. That requires when we do a study on that, and I'll talk about it in a minute, it is 11 aircraft carriers, 48 fast attack

submarines, 88 large combatants, 52 small combatants, and you work your way down to auxiliaries.

That total is 306 ships, but it's actually nine separate adds of types of ships. That is done by analysis of what was the build and then they actually take what's called the global employment of the force, joint force states, and combatant command demands. We actually go visit the combatant commanders and ask them what ships for the various missions. You have command plans, you have theater security cooperation plans, you have low-intensity conflict, a wide variety of items. After you get the combatant commanders, you go back, pull that together, and that then becomes that force structure assessment.

The ship counting rules were merely a change, a change to look at what do we have now and what are they fulfilling. We don't have 52 SSCs. We are building the LCS for that. What we have now are minesweepers, many of them in the Middle East. We have put 10 patrol coastal ships in the Middle East, 10 of the 13.

Historically, it was if you couldn't what we call self-deploy, you had to be lifted on a ship there, if you're in the United States of America you didn't count; when you were forward you did. That's why the minesweepers counted, but the patrol coastal ships were left off that calculus.

So we went back and said: Okay, 3 minesweepers in San Diego don't count, but the 10 patrol coastal ships forward do. We said those are not equivalents to, they don't affect the 52 count, they're all going to decommission by 2020, which the 306 was a 2020 number.

The other ones that were added was the high-speed ferry that we have purchased from the U.S. Maritime Administration and we're going out with to be able to move marines around the Pacific. It completes a theater security cooperation goal, not a warfighting goal, and the two hospital ships.

The CNO and the SECNAV met and said, the hospital ships have a wartime mission, they're rated, they're on what's called the time-phased deployment plan, they should flow to support combat, but they also deploy routinely now each year to support missions around the world, once again under the defense strategy.

It was made up of counting deployed ships that don't deploy, so you have the mine countermeasures ships and the patrol coastal ships, you have the hospital ships, and you have the one ferry, and that made up the new counting rules. We looked at changing the counting rules last year. It's a SECNAV instruction. It was merely to allocate. But it really has nothing to do with the 306 ships.

Senator REED. Thank you, but I must say that when you count deployed ships that don't deploy you get into something; you have to really work your mind around to appreciate that. Also, when you mentioned accounting it opens up a vast array of complex rules that sometimes reflect reality.

I appreciate your answer, but I think we're going to continue to draw some attention to these issues. Thank you very much.

Secretary Stackley, going back to the LCS, it is a block buy. You have favorable pricing fiscal years 2011 through 2015 based upon two ships from each yard. Yet, as I see the budget, only three ships

are going to be acquired this year in your proposed budget. How do you do that and still get the affordable pricing?

Mr. STACKLEY. Yes, sir. Losing the last ship of the block buy in 2015 and moving it into 2016 was another one of the casualties of the drop in the budget. What we are going to do—we have not engaged industry yet—is we’re going to sit down with the two shipbuilders associated with the LCS program and we’re going to look at production schedules, the vendor base, and performance on the program, and effectively look to extend the pricing, the pricing validation date for that last ship between the two shipbuilders.

In terms of what we anticipate as impact, I see zero impact in the shipyard based on the production schedules. The concern is regarding the vendor base. We have to take a hard look at the sequence in which they’re ordering material for that last ship and try to ensure that we don’t incur—there will be some cost impact. This isn’t going to go to zero. But to minimize any cost impact associated with delays to ordering material.

Senator REED. Thank you.

Let me ask a final question for the record, and that is, we’ve talked about specific shipbuilding programs, the carrier program, the LCS program. For the record, could you give us a status report on all the major shipbuilding programs, in terms of how well they’re performing, in terms of both cost and quality and delivery time, which I think are the three key variables? If you can think of more helpful information, please include that also. But that’s something I think would be terribly useful to the subcommittee as we go forward, a status report.

Mr. STACKLEY. Yes, sir. I’ll watch my time on this. I’m just going to start at the top of the list and work my way—

Senator REED. No, no. If you would take this for the record.

Mr. STACKLEY. Oh, okay.

Why don’t I send a letter to the subcommittee just giving you a walk-through.

Senator REED. Exactly.

Mr. STACKLEY. Yes, sir.

Senator REED. You can spend the time. You can have consistent measures program-by-program, so that you can give us green, yellow, red. We have green programs, we have yellow programs, and we have some red ones. We want to know what the red ones are and the green ones.

Mr. STACKLEY. Yes, sir.

Senator REED. Everybody can’t be yellow. [Laughter.]

Mr. STACKLEY. We have some green ones, sir.

[The information referred to follows:]

Together with our industry partners, Navy has made significant progress in the past few years improving performance in terms of cost, quality, and schedule. In the last 18 months, Navy delivered eight ships to the fleet, including two first of class ships, LHA-6 and MLP-1. There are currently 67 ships under contract, with 33 ships in the construction phase. All but two ships (i.e., 65 of 67) are fixed price contracts. A status update of the major shipbuilding performance by ship class is provided below.

#### *CVN-78 Class*

- CVN-78:

- CVN-78 is in its 7th year of construction and is 78 percent complete. Cost performance issues associated with early design, material procurement, and

manufacturing have been thoroughly accounted in other periodic (monthly) CVN-78 reports to Congress.

- Construction efforts remain on track for a March 2016 delivery date.
- Cost performance of the shipbuilder remains stable.
- Quality metrics indicate that CVN-78 is being constructed to a high quality standard, particularly for a lead ship of the class.
- Integration and test of developmental systems (including electromagnetic aircraft launch system (EMALS), advanced arresting gear (AAG), dual band radar (DBR)), as well as execution of the overall shipboard test program, represent the majority of remaining cost, schedule, and technical risk on CVN-78. The test program has only recently begun in earnest, with initial testing of EMALS, AAG, and DBR slated to begin within the next year.
- Land based test programs have been used to mitigate technical risk on CVN-78 developmental systems to the maximum extent practical and have been successful in reducing risk. However, these technologies are complex and issues are likely to be discovered during the shipboard test program that will need to be resolved.
- CVN-79:
  - The Navy is currently negotiating with Huntington Ingalls Industries-Newport News Shipbuilding (HII-NNS), for the award of CVN-79 detail, design, and construction (DD&C) contract. While negotiations continue, the Navy has extended the construction preparation (CP) contract to allow continuation of ongoing construction and material procurement.
  - The placement of nearly all (~95 percent) direct material on the CP contract is allowing HII-NNS to efficiently procure this material, including implementing economic order quantity procurements.

#### *SSN-774 Class*

- 18 ships are under contract with 8 Block III ships (SSN-784 to 791) under construction.
- Final Block II ship-*Minnesota* (SSN-783) was delivered to the Navy on June 6, 2013, 11 months early to the contract delivery. This is the shortest construction span for a *Virginia*-class submarine delivered by HII-NNS and continues the improvement in Block II performance by each of the shipbuilders over their previous delivery. The ship was within budget and had the highest readiness score of any *Virginia*-class submarine to date, as measured by the Board of Inspection and Survey (INSURV).
- The first ship of Block III, *North Dakota* (SSN-784) is projected to deliver this summer.
- The Navy's estimate of savings for the 10 ship fiscal year 2014 to fiscal year 2018 multi-year procurement (MYP) contract as a result of Block IV contract negotiations is \$5.4 billion or 16.5 percent over annual procurements.

#### *DDG-1000 Class*

- Three ships (DDG-1000 to 1002) are under construction.
- Late delivery of Huntington Ingalls Industries (HII) products (DDG-1000 and DDG-1001 deckhouses and hangars) to Bath Iron Works (BIW) coupled with the delay in electrical completion and HM&E delivery at BIW on DDG-1000 has caused cost overruns and schedule delays to delivery of both DDG-1000 and DDG-1001. The overruns are covered in the Navy's budget.
- The quality of products for DDG-1000 from BIW and HII has been good overall.
- Raytheon and BAE performance on cost, schedule, and quality has been good overall.

#### *DDG-51 Class*

- 14 ships are under contract with 4 ships (DDG-113 to 116) under construction.
- All four fiscal years 2010 to 2012 DDG-51s are currently forecast to deliver by the contract delivery dates. However at BIW, changes to DDG-1000 and DDG-1001 schedules may impact DDG-115 and DDG-116 deliveries.
- Both shipyards have experienced loss of learning and efficiency on the fiscal years 2010 to 2012 DDG-51s, compared to earlier ships of the class, due to the interruption of production. Both yards are taking aggressive steps to improve labor performance and achieve their former production efficiencies. The Navy sees an improving trend at both yards but this trend needs to accelerate.
- The quality of products for DDG-51 at both BIW and HII remains good.

*Littoral Combat Ship Classes (LCS-1 and LCS-2 Variants)*

- 20 ships are under contract with 10 ships (LCS 5 to 14) under construction.
- The total program cost remains within the service cost position established at Milestone B in 2010. The ship construction schedules have shifted on the initial ships of the block buy contracts as required facility upgrades were accomplished and manning was ramped up to support serial LCS production. The Navy has seen cost growth as a result of schedule delays but this growth is covered in the Navy budget.
- The LCS program has been careful to pace ship construction with efficient use of newly built facilities and a qualified labor force. Navy is continuing to work with both yards to capitalize on the facility investments and streamline the serial production processes at each location. Beginning in early 2015 LCS, each builder will deliver one LCS approximately every 6 months.
- The quality of the products at both Austal USA and Marinette Marine continues to be good.

*LHA-6 Class*

- One ship (LHA-7) is under construction.
- HII delivered LHA-6 (USS *America*) in April 2014. The ship was of high quality, but was late to contract schedule and completed at the ceiling price.
- LHA-7 is approximately 5 percent complete.
- The first of flight 1 ship of the *America*-class, LHA-8 is more than halfway through preliminary and contract design with efforts ongoing under the early industry involvement contract to drive affordability into future procurement. LHA-8 procurement is planned for fiscal year 2017.

*LPD Class*

- Two ships (LPD-26 and LPD-27) are under construction.
- HII delivered LPD-25 (USS *Somerset*) in October 2013. The ship was of high quality, but was late to contract schedule and completed at the ceiling price.
- LPD-26 and LPD-27 are scheduled to deliver in May 2016 and July 2017, respectively.
- Early performance on LPD-26 and LPD-27 was challenged by facility capacity and an influx of green labor. A portion of pipe detail and unit assembly for both ships was/is being conducted at the Avondale facility to mitigate impacts from those early challenges; and production performance has stabilized. Quality, outfitting levels, and rework percentages have improved over previous hulls. Both ships' performance indicators predict delivery will be late to contract schedule and above the contract budget.

*JHSV-1 Class*

- Seven ships are under contract with three ships (JHSV-4 to JHSV-6) under construction.
- After delaying the initial start of production to meet the Navy's production readiness requirements, Austal delivered JHSV-1 in December 2012 at high quality. Now in serial production, Austal delivered JHSV-2 in June 2013 and JHSV-3 in March 2014. The initial operating capability for the class was met in November 2013 and JHSV-1 deployed on her maiden voyage in January 2014 and performed as expected.
- With a competitive fixed-priced incentive contract, the lead ship cost performance was near ceiling, and over target costs were experienced on the follow ships under construction. These costs were covered in the Navy's budget. Both cost and schedule performance are improving on the follow ships, although a competition for labor resources within the shipyard with the LCS program, has resulted in some schedule slip on the JHSVs.
- The Board of INSURV was impressed by the quality of both the ships. "USNS *Spearhead* (JHSV-1) was found to be a highly capable, well-built, and inspection-ready ship" and that "overall performance compares favorably to more mature shipbuilding programs." The USNS *Choctaw County* (JHSV-2) raised the bar even higher, with perfect scores in all five underway demonstrations of its final contract trial prompting the senior INSURV inspector to comment "... this was the first ship in his memory that scored 100 percent across the board on its demonstrations."

*MLP-1 Class*

- One ship is under construction (MLP-3).
- With design complete before start of construction, MLP-1 and MLP-2 were both delivered with high quality, on schedule, and on cost.

- MLP-3 will deliver in 2015 and performance indications are that this ship will continue the on-schedule and on-cost trend for the class.

Senator REED. Senator Sessions.

Senator SESSIONS. Thank you, Mr. Chairman. Thank you for the leadership of this subcommittee and the leadership you're providing in the Senate. You do a great job and it's an honor to work with you.

Senator McCain made some criticisms and analyzed areas of concern that he had with the LCS. Let me ask you a few questions. Secretary Hagel's decision basically affirmed the production of 32 ships, and then he said we have to have an evaluation after that. The program will stop, which I wish he hadn't said, but he said it will stop, but there would be an evaluation after that as to where we would go and whether or not this ship is proving itself and what capabilities could be added to it or whether we needed a new ship, something of that.

Wasn't that the essence of what Secretary Hagel said?

Mr. STACKLEY. Sir, the only thing I have to work with here is the memo that he signed out to the SECNAV, which did not say that the program will stop. He said the program will not contract beyond 32 ships.

Senator SESSIONS. You're correct, that's right.

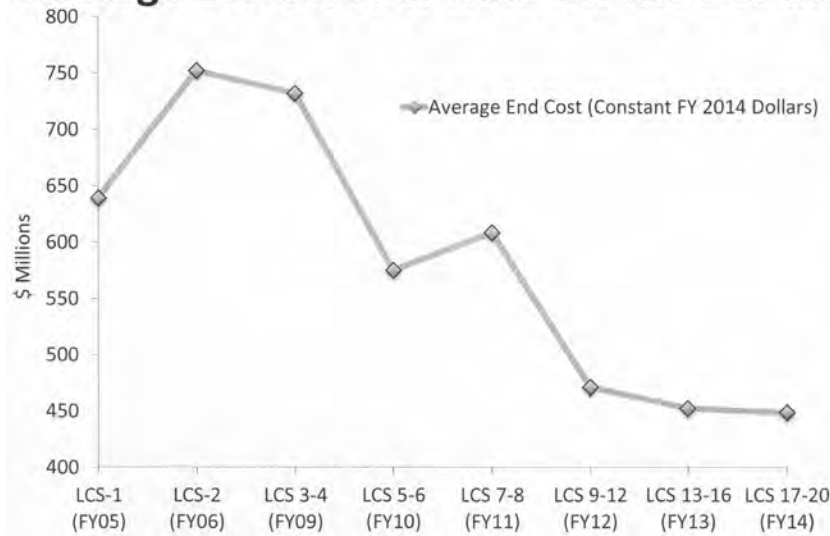
Mr. STACKLEY. Conduct a study, SSC study, to inform the 2016 budget, budget build, and to look at a new design and an existing alternative design or a modified LCS to address his concerns regarding lethality and survivability of our SSCs.

Senator SESSIONS. Rear Admiral Thomas S. Rowden, USN, Director of Surface Warfare Division on the staff of the CNO, said recently: "Today LCS is the most cost effective solution to address the enduring littoral capability gaps. We remain under the congressionally-mandated cost cap."

We have a chart. I'll just show it to you.

[The chart referred to follows:]

### Average LCS Cost Per Hull: On the Decline



CBO February 2014 Baseline's GDP Index data used for inflation adjustments.

Source: Office of Sen. Jeff Sessions (R-AL), DoN FY14 Budget Justification of Estimates for SCN (April 2013), CRS.

Senator SESSIONS. Let's follow this and examine the cost. This represents our analysis, really with Mr. Ron O'Rourke from the Congressional Research Service, his numbers on the ship. These are fiscal year 2014 numbers, which make fiscal year 2005, the first year, look worse than it was. That's more money than we actually spent at the time. But it's gone from \$650 million to \$750 million and then commenced a downward trend since that time.

It seems to me, having been in the shipyard in Alabama, that this ship, it almost looks like an automobile plant in the sense that the ship moves through in one of the most modern, maybe the most modern, shipyards in the world. By the time it hits the water, it's completely outfitted, with little work needing to be done while the ship's out on the water. The costs continue to fall.

Would you explain to us how you see the production capability and comment on the fact that at 32 ships, it seems to me that the cost would be about as low as we would ever see it and the errors should be all worked out of the system by then and we are really receiving a very fine ship with little error and at the lowest possible price.

Mr. STACKLEY. Yes, sir. The key factors were first, design stability. You see all the costs on the front end of the program. That was largely attributed to the fact that there were significant design changes on each lead ship right out of the blocks, driven by our demand for increased survivability. We changed the specifications to increase the survivability of the LCS class right about the time that we awarded those first ships.



Senator SESSIONS. Mr. Chairman, Secretary Stackley, as I recall, the initial estimate was about \$290 million or something a ship, the base ship, almost as a commercial ship.

Mr. STACKLEY. Yes, sir.

Senator SESSIONS. Then when the Navy added to that it went up to about \$350 million. It went up from there. But is that the kind of thing you have to work your way through every time you start a new class of ships?

Mr. STACKLEY. That's the kind of thing we did work our way through here. Effectively, a change to the design and the specifications at the same time we started construction on the lead ships, which by itself has significant challenges, and that drove the cost on the first of class.

We locked down the requirements. We stabilized the design. At the same time, both shipbuilders invested heavily in their facilities. Then we provided through the block buy a long period of stable procurement, so then they could also work with their vendor base and then come up with a hiring plan to provide the skilled workforce that they need so that you can see the type of learning and cost improvement that you have on your curve there right now.

Senator SESSIONS. Now, what is the congressional cost cap? Congress when the price was high put a cost cap on it. Do you remember when that was? What is the cost cap, and are you under it now?

Mr. STACKLEY. I think the current cost cap was set in 2010. I don't even look at that cost cap any more because we're nowhere near it. The cost cap was set in 2010 with an allowance to account for escalation, and what's happened is our costs have been going down while the cost cap would incrementally increase associated with inflation. It's not even a factor in terms of our decisionmaking.

Senator SESSIONS. You don't look at it because you're so far below it?

Mr. STACKLEY. Exactly.

Senator SESSIONS. Would altering this production rate, could that have costs for the Navy if the assembly line is broken or there are significant delays?

Mr. STACKLEY. That statement is true of all of our shipbuilders right now. We have several programs that are in stable production flow and they are all at risk of reduced production quantities, which will have a cost impact. In the case of LCS, the shipbuilders basically tuned their facilities to about a two-ship per-year rate. As you can see in the FYDP, that drops down to about a two- to three-ship per-year rate. When you split it out over the builders, it's about a one and a half-ship per-year rate.

That reduced rate is going to have some cost impact when we look at future contracts.

Senator SESSIONS. I believe the Navy had stated that the ship for survivability purposes meets or exceeds the same standards in those elements of survivability and recovery for the frigate. I believe the frigate has about 215 sailors to operate that ship, is that right, Admiral?

Admiral HILARIDES. Yes, sir.

Senator SESSIONS. That this ship would come in at 50, 60, or so sailors to operate this highly modern ship. But is its survivability, Admiral, consistent with the frigate's survivability?

Admiral HILARIDES. I'll go ahead. I think the CNO covered in his testimony very well that the elements of survivability include susceptibility, that is how easy it is to hit the ship, vulnerability, its self-defense capabilities, and then the recoverability part, which is what a lot of people think of as survivability. The recoverability of the ship with an aluminum hull and thinner skin is almost by definition slightly less. But the modularity and the ability to go modify the mission package to bring susceptibility down dependent upon the threat scenario balances out, and I would say that, yes, it is of a roughly equal survivability to the frigate.

Senator SESSIONS. My time is up. I would just add for the record that Congress asked the Navy and the Navy is seeking and has sought to develop a faster, more cost-effective ship utilizing smaller crews and less fuel with a lot of flexibility and a substantial mission bay and capabilities that we may not even know today a ship like that may need to have in the future.

This ship, the bugs are coming out of it, the cost is dropping, and we're below what the cost cap said significantly. The Navy remains committed to it. It's a joint requirement of 52 ships, fully approved through the normal, tough combatting competitive system of the Navy.

I guess I would say to you gentlemen, you're going to be challenged. Senator McCain is going to challenge you, as you know he will, and we all should. I respect that. But I do think this is an extraordinary ship, very cost-effective, and I believe it has capabilities we may not even know we need now, that we will have in the future.

Thank you.

Senator REED. Senator, I've had two rounds. If you'd like to ask additional questions that you have, it's completely appropriate. We are waiting, I think, on some of our colleagues who are returning. I have a couple of other comments I could make, but if you have additional questions, please, take this time.

Senator SESSIONS. With regard to deployment of the ship, it would normally be deployed with other ships who may have—as an aircraft carrier is vulnerable, they are deployed with other ships and other air cover and protection. In hostile zones, wouldn't this ship also be deployed in concert with other ships that would help provide protection?

Mr. STACKLEY. Absolutely, sir. In my opening remarks I said we were looking at three things: requirements, capabilities, and concepts of operations. Under all circumstances, the LCS, like most of our fleet, will be operating as part of a larger group. While the LCS is designed for its own self-protection, it does rely upon *Aegis* destroyers and cruisers to provide the larger air cover over the theater area.

We are not inclined to send ships in alone and unafraid in a hostile environment. Whether it's an LCS or other ships of the battle group, we operate as a force, and that concept of operations is an important part of what Admiral Hilarides was referring to when he described the CNO's characterization of survivability.

When you think about the ships that the LCS is replacing, mine countermeasures ships, patrol craft, the current FFG-7 class, the LCS has a far more robust degree of survivability and self-defense than those ships. The mine countermeasures ship today has zero self-defense. Zero. When you think about a mine countermeasures mission being performed by a LCS, she is far more survivable than the ships she is replacing.

Senator SESSIONS. Thank you.

I guess I'll just comment and may ask for the record. Mr. Stackley, I respect you and I think all of us on the subcommittee do. I think the Nation should be thankful for having you at this very tough job that you have. The Navy will be facing some tough choices. We just went through the military, the Army's downsizing of its members. Over 100,000 they're talking about, well over 100,000 members.

I'm having a little difficulty understanding. People talk about the sequester. We've already hit the bottom of the cuts. The budget's supposed to be flat the next couple of years and then grow at 2.5 percent a year for the next 6 years, I believe, or 7 years, which is about \$13 billion a year for the defense budget increases.

It seems to me you have a difficult time right now with flat budgets and you still haven't fully achieved the savings. Steps you take now to save money may only save money several years out in the future.

It seems to me your budget situation would be better 5 years from now if nothing changes than it is right now, instead of worse.

Mr. STACKLEY. Actually, sir, as you're aware, the budget that we submitted across the FYDP is about \$115 billion above BCA levels.

Senator SESSIONS. That's your submission. The law of the United States of America is the BCA, as modified by Ryan-Murray, which helped this year and next year some.

Mr. STACKLEY. Yes, sir. The BBA is above what the BCA would have placed us at. When we looked at if we dropped back down to the BCA levels through the FYDP and we look at what that does to our ability to provide for the Nation's security, we determined that that's not adequate. Therefore, we laid in a budget, constrained as best as we could, as close to the BCA level as we could, but it's \$115 billion above that, and that defines what we believe to be the budget necessary to operate, maintain, support, and recapitalize the force to meet the national defense strategy.

Senator SESSIONS. The BCA reduced the growth of spending from a growth of \$10 trillion to a growth of \$8 trillion over 10 years. Now, I just had in my office the Legal Services Corporation, the National Institutes of Health, both of which feel they can't sustain our budget either. We're going to have to challenge you to do the best you can, and I think—I will just say this. If we have to find money, we're going to have to find more money for DOD. It's a core function of government. But don't think this is going to be easy to achieve, because when Congress makes a commitment to limit its spending, it needs to stay there.

Mr. STACKLEY. Yes, sir. Sir, there's absolutely no complacency. One of the things that we are doing our best at is trying to inform Congress as best as possible what the difference is between the budget we've submitted and what would happen if we dropped

down to the BCA levels and what impact that has on our ability to provide for the Nation's defense.

Senator SESSIONS. I look forward to working with you on that. Thank you, Mr. Chairman.

Senator REED. Thank you, Senator Sessions.

Before I recognize Senator King, Mr. Secretary, you made reference to a memo or a letter from Secretary Hagel with respect to LCS. Could we have a copy for the record? That would help us, if that's possible.

Mr. STACKLEY. I will do my best. I'll go back to the system and get it to you for the record.

[The information referred to follows:]

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**United States Senate**  
COMMITTEE ON ARMED SERVICES  
WASHINGTON, DC 20510-6050

January 31, 2014

The Honorable Chuck Hagel  
Secretary of Defense  
The Pentagon  
Washington, DC 20301-3000

Dear Secretary Hagel:

I appreciated the chance to talk to you the other night on the subject of truncating the Littoral Combat Ship (LCS) production plan at 32 ships. I think we had a very good discussion.

I am encouraged to hear you say that you had made no decision about whether to make a change from building the current LCS designs to building some notional ships with greater escort capability (presumably including a better anti-air warfare (AAW) defense system).

I called you because I was concerned that the Department of Defense (DOD) might have been making a decision to truncate the current LCS program although:

1. The current plan (52 LCS) includes a group of vessels designed against a set of requirements vetted through the Joint Requirements Oversight Council (JROC) process and for which costs are now well understood; and
2. The alternative is just a paper alternative, aimed at a set of unspecified requirements that have not followed: (a) the JROC process for defining requirements; or (b) the early acquisition process, where we could identify the likely costs of meeting some set of requirements that differ from those behind the current LCS program.

I understand that there is no definite design for such an alternative AAW ship, and no validated requirement for such a ship. It has been suggested that these ships would add an AAW escort capability to those 88 Aegis ships that are already a part of the 306-ship fleet, despite the fact that the Navy has already determined that 88 Aegis cruisers and destroyers are sufficient to meet their AAW escort needs. Moreover, the alternative AAW ship would necessarily be more expensive than the LCS design, and the reduction in the LCS buy would undermine the ability of the LCS fleet to provide the full mix of mine countermeasures, anti-surface warfare, and anti-submarine warfare capabilities the Navy has determined that they need 52 LCS ships to complete.

Before a change of this magnitude is made, there should be a thorough analysis into whether the requirements have changed in favor of needing more than 88 AAW escorts, and of the costs of meeting those requirements. The analysis should also address the impact of the proposed change on the Navy's ability to achieve the 306-ship fleet the Navy has consistently testified is required to meet our national security objectives.

Frankly, I don't understand why the Department would even consider making a change of this importance before such an analysis is completed. Since the proposed truncation of the LCS program would not occur until fiscal year 2018, there is nothing to lose (and everything to gain) by waiting on a thorough analysis of any proposed alternative.

I look forward to working with you and the Navy as DOD evaluates future alternatives for meeting validated Navy needs.

Respectfully,

A handwritten signature in black ink, appearing to read "Carl", written in a cursive style.

Carl Levin  
Chairman



SECRETARY OF DEFENSE  
1000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-1000

MAR 12 2014

The Honorable Carl Levin  
Chairman  
Committee on Armed Services  
United States Senate  
Washington, DC 20510

Dear Mr. Chairman:

Thank you for your letter dated January 31, 2014, regarding the Littoral Combat Ship (LCS). Small surface combatants are critical to supporting our national security objectives and providing Combatant Commanders flexible support, and I want to ensure we have a fleet of ships that is fully capable of meeting those demands.

In light of our continued fiscal constraints, we must direct shipbuilding resources toward platforms that provide not only presence, but also power projection and the capability to operate in every region and across the full spectrum of conflict. The LCS was designed to perform its missions in relatively permissive environments. I am concerned that the ship may not have the protection and firepower to survive against emerging threats and more advanced military adversaries with new technologies. Therefore, I have directed that no new LCS contract negotiations beyond 32 ships will go forward.

To be more prepared for future full spectrum conflicts, I have directed the Navy to provide me with alternatives for a more capable and lethal small surface combatant, consistent with the capabilities of a frigate. I have directed the Navy to consider options that include a completely new design, existing ship designs, and a modified LCS. I have also directed Navy to provide me with regular updates on LCS performance and information derived from test results and recent deployments. This will include assessments of LCS survivability, performance, sustainment cost, materiel readiness, lethality, and growth potential.

I assure you that my decision is based upon a thorough analysis of LCS capabilities as represented in the Joint Requirements Oversight Council (JROC) approved documents. As we consider a new platform, I will seek the JROC's perspective on capabilities including improved survivability and lethality, as well as the contributions of a small surface combatant across the full spectrum of missions. When examining the alternatives, I will ensure requirements are fully vetted and that we consider cost, capability, and capacity. Alternatives are due to me later this year.



I look forward to working with you as we move toward building a fully capable small surface combatant fleet that meets the threat environment for today and the future. Thank you again for your strong support of the Navy.

Sincerely,

A handwritten signature in black ink, appearing to read "John H. ...", with a long, sweeping underline.

Copy to:  
The Honorable James M. Inhofe  
Ranking Member





## OFFICE OF THE SECRETARY OF DEFENSE

WASHINGTON, DC 20301

FEB 24 2014

MEMORANDUM FOR SECRETARY OF THE NAVY  
CHIEF OF NAVAL OPERATIONS

SUBJECT: Littoral Combat Ship (LCS) program

Thank you for your strong and effective leadership of our Navy. As we both know, we are all here at a defining time for our national security enterprise. I have given careful consideration to the Littoral Combat Ship (LCS) program, and I wanted to get back to you on my decision. I have consulted with Naval Surface Commanders, acquisition officials, policy and evaluation experts and reviewed preliminary assessments and evaluations of the LCS.

If we build out the LCS program to 52 ships it would represent one-sixth of our future 300-ship Navy. Given the emerging threat environment of the future, I have considerable reservations as to whether this is what our Navy will require over the next few decades. I recognize the importance of presence, which is tied to the number of ships. But I also believe that capability and power projection is the foundation of our Navy's effectiveness.

Therefore, no new contract negotiations beyond 32 ships will go forward. The Department of the Navy is directed to provide me the following information:

- Provide regular updates on LCS performance based on test results and experience from recent deployments. These assessments should consider survivability, performance, sustainment cost, materiel readiness, lethality and growth potential.
- Submit to me, in time to inform the PB 2016 budget deliberations, alternative proposals to procure a capable and lethal small surface combatant, generally consistent with the capabilities of a frigate. Options considered should include a completely new design, existing ship designs (including the LCS), and a modified LCS. Include target cost, mission requirements, sensors and weapon requirements and required delivery date.

If a modified LCS is an acceptable option for a more capable small surface combatant, negotiations for LCS beyond the 24 ships currently on contract should seek to incorporate the upgraded LCS as soon as possible. Should the aforementioned assessments prove dispositive against the LCS, I retain the right to modify the program.

As we both agree, smart investments in our future ships will be required as we continue to face limited resources over the next few years. We need to focus on what the Navy will require in the years ahead to meet our Nation's security needs and future missions.



Thank you and the men and women of the Navy for your continued commitment to the defense of our country.

A handwritten signature in black ink, appearing to read "John Baez". The signature is stylized with a large, sweeping initial "J" and a horizontal line extending from the end.

cc:  
Acting Deputy Secretary of Defense  
Chairman of the Joint Chiefs of Staff

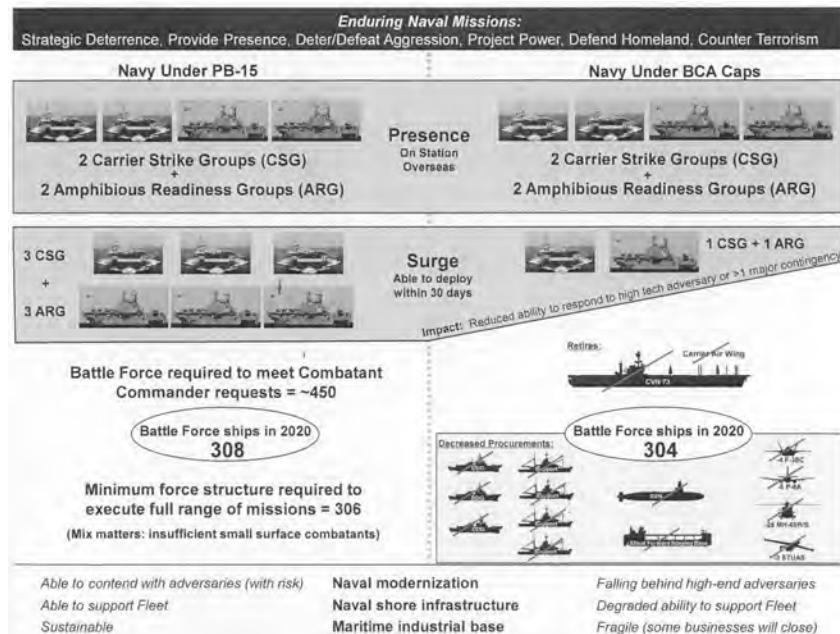
Senator REED. Thank you very much.

Senator King, please.

Senator KING. Gentlemen, thank you very much for joining us. I'm looking forward to welcoming Secretary Stackley and Admiral Hilarides to Maine on Saturday for the christening of the *Zumwalt*.

Secretary Stackley, at the posture hearing last month, Admiral Greenert showed us this chart, which I'm sure you're familiar with, which indicates that if the sequester returns in 2016 as it's currently scheduled to do, basically there would be three less DDGs, four less support ships, the *George Washington* would be retired with a carrier air wing.

[The chart referred to follows:]



Senator KING. I have a specific question. If the sequester returns in 2016, does that affect the 10-ship DDG contract that was just finalized?

Mr. STACKLEY. Sir, let me say everything is hypothetical, correct?

Senator KING. Right.

Mr. STACKLEY. What the CNO provided in that chart is, early on in the process in the build of the 2015 budget—and I mentioned the strategic choices management review, and we looked at going down to the BCA levels—that chart reflects one of the standing scenarios that we looked at if we had to stay at the BCA. Did that scenario make its way through the budget process where we had all the debate that needs to take place, and we racked and stacked and visited priorities and things of that nature? No. But is that a potential outcome? Yes.

With regards to the specific question of, if we go down to the BCA levels, will that impact the 10-ship multi-year?

Senator KING. In 2016.

Mr. STACKLEY. Yes, sir, and that's an unanswerable question right now, except for I will tell you that shipbuilding is a top priority for the SECNAV. The DDG-51 is an extremely strong-performing program, and when it comes time to making those decisions if we have to budget at the BCA level, those two factors are going to weigh very heavily in that decision.

Senator KING. Thank you. I appreciate that. I assume that's as far as you can go, given the knowledge of the situation.

Mr. STACKLEY. Anything beyond that would just be projecting decisions that haven't been made.

Senator KING. Another question involving destroyers. Does the President's budget request and the 5-year plan provide for the funding of all three of the DDG-1000s?

Mr. STACKLEY. Yes, sir. The DDG-1000s were previously appropriated. There's additional funding in the budget request. It's tied to, when the program was truncated, that drove costs up in the program and so there was a cost-to-completion line that was laid in. We request the funding in the year of need and that's what you see in the budget.

Senator KING. But that budget request is the one that exceeds the caps in the out-years, 2016, starting in 2016. The President's budget request is for more money than is within the current sequester plus caps.

Mr. STACKLEY. Yes, sir. In the FYDP 2016 and out, the total budget request is above the BCA level. That does not infer that the DDG-1000 funding that's laid out in those years is above the BCA level.

Senator KING. Let me ask a more general question about the shipbuilding industrial base. What's your assessment of the overall health of the shipbuilding industrial base? Where are the risks, and not only of the major shipbuilders, of course, which I have an interest in, but also the supply chain?

Mr. STACKLEY. I'm very concerned with it. All testimony, Department of the Navy posture hearings, has been to the effect of: we don't have enough ships, the budget is putting pressure on our shipbuilding account. You look at the industrial base today and I will tell you that half of our shipyards are one contract away from going out of business. It's extremely fragile.

Senator KING. If that's the case, by the way, that means there are an awful lot of companies that most of us haven't heard of who may be one contract away from going out of business.

Mr. STACKLEY. Of the vendor base, we have great insight into the health and welfare of the shipyards, the shipbuilders. It gets more difficult the further you get away from that first tier and delve down into the vendor base, yes, sir.

Senator KING. This is not only an economic concern. This is a national security concern, is it not?

Mr. STACKLEY. Absolutely. Without our strategic industrial base, we don't have a Navy. We have to be very mindful of the decisions that we make in our formulation of our budget. There's current readiness and there's future readiness. We need the industrial base in both halves of that debate.

Senator KING. Turning to the ORP, which I understand is a very high priority, the Navy is analyzing something called a joint cross-class block-buy contract for the *Ohio*-class and the *Virginia*-class submarines. Can you explain what this concept means and to what extent you think it could produce savings compared to doing separate contracts for the two classes?

Mr. STACKLEY. It's very preliminary to be talking about how we buy the ORP, because that's a 2021 boat. The advanced procurement's in 2019. We're at the point in time on that program where we have to start making decisions between the two boat builders so they can start to invest in facilities that will be needed to support the construction of the ORP.

As we approach those decision points, we're looking at the current *Virginia*-class construction program, looking at existing facilities. We're looking at where they currently have strengths in the way they divide the construction of the *Virginias*, and that becomes a baseline for determining how the ORP will be built, but we have made no decisions yet in that regard.

Senator KING. A broader question. If sequester returns without any modification in 2016—and Senator Sessions is right that 2016 is essentially flat, based upon these 2 years, and then there are increases built into the assumptions that go out into the out-years—can you reach your goal of a 306-ship Navy without some relief from sequester, at least in 2016?

Mr. STACKLEY. The reality is that it takes about on average 4 to 5 years from when you put a ship under contract to when it's delivered. There's a lot of energy in the system right now. By that, I mean, I described we have 43 ships that are currently under construction. In the near-years those ships will continue to deliver. We'll stay on our current plan for decommissionings. You'll continue to see an increase in our ship count in the near-years.

Sequestration is going to start to impact the 2020s, and that's where you're going to start to see significant dropoff in our ship count in terms of the total force. That is compounded when you overlay on top of that the funding requirements for the ORP.

Senator KING. You get hit in the jaw in 2016, but you don't feel it until 2020?

Mr. STACKLEY. Yes, sir.

Senator KING. Thank you very much.

Thank you, gentlemen.

Senator REED. Thank you, Senator King.

Senator Kaine, please, in order of appearance, Senator Kaine.

Senator KAINE. Great. Thank you, Mr. Chairman, and thank you all for your testimony.

Secretary Stackley, I want to talk to you about the opening comments that you made about the carrier, because I'm just trying to work through and make sure I understand this fully from having now sat through a number of hearings about it.

From all the testimony I have heard from Secretary of Defense Hagel to Secretary of the Navy Mabus to others who have appeared before the full committee and the subcommittee, it seems like the following is all a consensus position: It is the military policy, desire, of the White House and the DOD to have 11 carriers, at least. It is a statutory requirement that we have an 11-carrier Navy. If

we get sequester relief, we are committed to having an 11-carrier Navy. Those things have all been said.

But in looking at the budget numbers, we were puzzled, and there's been a lot of questions on this full committee and this subcommittee about it, because the budget and the FYDP, if we grant sequester relief to the Department does not clearly identify the funds for the carrier, even though the President in his 2014 budget and Congress in our 2014 NDAA and appropriations bill put about \$245 million into the refueling of the *George Washington*.

I guess we're trying to get to the point of understanding what exactly is the position of the Navy on this, particularly on the budgetary side. Your opening testimony suggested we know that it's a requirement, we think it's a good idea, we are proposing because of budgetary challenges to delay that refueling. Do I follow you right?

Mr. STACKLEY. Let me clarify. We know it's a requirement. It's more than a good idea. It is a hard-core requirement for 11 carriers. I described that when we started formulating this budget and we looked at the results of the Strategic Choices and Management Review and we were planning around BCA levels, we were looking at losing two to three carriers, and we fought to getting that down to being minus one.

In the end, we ended up coming across with a budget that goes above BCA levels. At that last stage, we didn't try to shoehorn the carrier back in. There was also a fair degree of uncertainty over whether or not ultimately we'd be seeing congressional support for anything above BCA levels in the out-years.

What you have heard from Secretary Mabus, and I believe also from Secretary Hagel, is a commitment that if we are confident in budgets in 2016 and beyond being above the BCA level, the carrier will be in there. In fact, we're building our POM with that guidance today.

I'll ask Admiral Mulloy if he wants to add.

Senator KAINE. Please, Admiral Mulloy.

Admiral MULLOY. Yes, sir. As we're now working with the Office of the Secretary of Defense (OSD), they are looking at the total DOD assets and assuming, as Mr. Stackley said, the DOD number was \$115 billion over the FYDP, the Navy is about \$30-something billion of that. If that \$115 billion appears for DOD and there's Navy money, then we would go back and rerack and stack. What those trades would be made between us and all the Services is not done yet. But the commitment was if the \$115 billion is there in 2016, then the Navy would have the funds and we would make the funds available to keep the carrier.

But once again, it comes back to being a balance of force. If I go to the BCA level and I have 11 aircraft carriers, what am I not going to have for support ships? What submarines won't I have? What airplanes will I not have to be flying off the aircraft carrier? Those all are built in shorter time. You have to have a balance in what you do and that's my primary focus.

Senator KAINE. Let me walk through the two forks in this decision path that we're on. We give you a budget above the BCA level or we don't. On the, we give you the budget above the BCA level—and I'm certainly going to do everything I can to suggest that we

should; I was glad that we were able to provide BCA relief in fiscal years 2014 and 2015 as members of the Budget Committee. That was a good thing and I want to do it for 2016 and out.

It sounds like, give us that relief—and you're only asking for essentially relief from about half the sequester. You would absorb the other half over the entire length of the sequester. But the word to us has been, give us a signal and give us a signal in an appropriate time so that we can rerack and stack, as you say, and find a way to meet the 11-carrier requirement.

The timing of the signal is potentially a challenge, because since we did a 2-year budget we're not likely to do another one until March or April of calendar year 2015, which would be in the 2016 fiscal year. But my understanding is, based on your own budget schedules, you're going to be presenting material to the White House for their work on 2015 and 2016 budgets by the fall. We will likely not be sending you a signal with a 2016 budget until the spring.

What kind of signal are you looking for and why isn't the action of Congress in putting \$245 million into procurement for this particular item in the fiscal year 2014 omnibus—that's a pretty good signal and we just did that about 2 months ago. What kind of signal are you looking for to reshuffle to make sure that we are providing for that 11th carrier?

Mr. STACKLEY. I'm going to give you an inexact answer, sir. Here are the tools that Congress has. One, we have public hearings. Two, you have the NDAA. Three, would be action on the budget itself dealing with the BCA and other tools.

We are leaning forward. We are leaning forward in terms of building our POM to put that carrier back in there. The signal, I don't know how clear a signal we're discussing here. But when the budget is at OSD at the end of this year and we have the 2015 NDAA and the 2015 appropriations bill in our hands and all other public record and discourse has taken place between DOD and Congress, then at the Secretary level I believe they will determine whether or not we have the signal to send the carrier with the budget in 2016.

Senator KAINE. Let me ask one other thing about a signal. My understanding is we have appropriated \$245 million in fiscal year 2014 for the refueling, and the Navy's order is to only use \$63 million of that this year and not use the remainder of the \$245 million; is that correct?

Mr. STACKLEY. That's correct. Here's where we are. \$245 million, of which the first phase of the refueling overhaul is a lot like the first phase of a defueling activity.

Senator KAINE. Right. You need to spend the money regardless of which path you're going.

Mr. STACKLEY. Exactly. It's planning, it's opening them up, and it's starting to pull the fuel. The \$63 million is to support those mutual activities. In the near term, hopefully we'll be seeing defense bill markups and that might be a sufficient signal to go ahead and start the work on the balance of the \$245 million.

But I will tell you that given where we are today, we're not going to recover the schedule back to the original start date of September 2016. We will probably be able to improve upon it as opposed to

losing a full year if we go down that path. But we're already eating into that schedule today.

That would be a measured first step, but the ultimate, which is the \$7 billion associated with the carrier and the air wing and manpower—that measured first step isn't a leap into the balance of the funding requirement for that RCOH.

Senator Kaine. Even if we don't grant additional relief from the BCA, there still is an 11-carrier statutory requirement.

Mr. Stackley. There's a law in place.

Senator Kaine. Yes.

Mr. Stackley. Yes, sir.

Senator Kaine. All right, thank you.

Thank you, Mr. Chairman.

Senator Reed. Thank you, Senator Kaine.

Senator Blumenthal, please.

Senator Blumenthal. Thanks, Mr. Chairman, and thanks for holding this hearing. Thank you for being here and for your service to our Nation.

Mr. Secretary, I understood from your earlier testimony that the ORP has about a \$150 million gap on the nuclear reactor development and that that funding is going to be sought from alternative sources, specifically the DOE. Can you expand a little bit on that?

Mr. Stackley. Let me clarify. For our nuclear programs, the Navy has the responsibility for the boat, the weapons systems, and the propulsion plant. But the NNSA under the DOE has responsibilities associated with the reactor plant itself. Just like DOD, they're dealing with their budget shortfalls and they've allocated, I believe the number is about \$150 million towards their efforts in support of the ORP. That does have a direct impact on our schedules, both near-term and long-term.

Between DOD, DOE, and, frankly, Congress, because we're bringing this to you, we have to resolve this shortfall or we are losing schedule on the program.

Senator Blumenthal. To be precise, the shortfall is \$150 million?

Mr. Stackley. Let me get back to you.

Joe, do you know?

Admiral Mulloy. Sir, the \$150 million is across a number of programs. We'll get the exact specifics. One part of it involves the reactor core itself for the ORP. The other component, Naval Reactors, was able to protect because it was a general \$151 million. There are some other areas in nuclear training and other areas that don't directly affect the Navy.

But we'll get you a breakdown via Naval Reactors. There is a component that directly affects the core development for the ORP and I don't remember the number, but it's not the \$150 million. It's somewhere in the \$20 million to \$50 million range that affects the ORP.

[The information referred to follows:]

- The fiscal year 2014 Consolidated Appropriations Act resulted in a \$151 million shortfall to Naval Reactors' fiscal year 2014 Department of Energy (DOE) appropriation which primarily impacted two key areas:
  - Nuclear Operating and Infrastructure (NOI) Funding (\$99 million reduction) and Spent Fuel Handling Recapitalization Project (\$45 million) reduction.



- Naval Reactors' entire fiscal year 2014 funding request was validated by the Department of Defense (DOD), DOE, and the Office of Management and Budget during the recent Cost Assessment and Program Evaluation (CAPE) review of National Nuclear Security Administration funding.
- Some of the more visible and immediate impacts on the Navy that resulted from the fiscal year 2014 reduction include impacts on nuclear operator training, delay to *Ohio*-class replacement (OR), and delay to the spent fuel processing facility needed to support refueling and defueling work. Given the immediate impacts to both the operating fleet and OR design, securing \$35 million of additional funding is the highest priority.
  - Training (\$24 million): Fiscal year 2014 funding level was insufficient to complete the required maintenance for both operating prototype reactors in New York. Naval Reactors prioritized the work needed at the S8G plant, and would have to shut down the MARF plant by April 2015, if funding is not available to complete the work. The fiscal year 2015 impact to the fleet would be 450 fewer qualified operators. That number would grow if the shutdown is extended.
  - High Performance Computers (\$11 million): Fiscal year 2014 funding level was insufficient to support a planned procurement (\$11 million) of high performance computers (HPC) necessary to complete the reactor design for OR. If not restored in fiscal year 2015, the core design is expected to be delayed up to 6 months. The next planned HPC procurement was fiscal year 2016, but Naval Reactors is considering options to purchase in fiscal year 2015 (assuming adequate funding is available) to minimize the delay to OR. If HPCs are procured at the beginning of fiscal year 2015, Naval Reactors can reduce the impact. While the HPCs are important to OR, they are also an integral part of the toolbox supporting the existing fleet. This is why they are included in laboratory base funding.
- Additional impacts include:
  - Naval Reactors Facility (\$20 million): The current facility is approaching 60 years of age and exhibits commensurate deterioration, including leaking water pools. Naval Reactors is unable to perform necessary maintenance and comply with agreements made with the State of Idaho.
  - Capital Equipment and Construction/Remediation Projects (\$15 million): Naval Reactors is unable to procure and execute capital equipment and construction/remediation projects vital to fleet operations.
  - Spent Fuel Handling Recapitalization Project (SFHP) (\$27 million): Funding is required to support continued conceptual design of the SFHP. This reduction in funds results in a 2-year delay in delivery of the M-290 shipping container unloading capability and will require DOD to procure eight additional M-290 shipping containers, at a cost of \$200 million, to be used for temporary storage of spent nuclear fuel until the facility becomes available.

Senator BLUMENTHAL. Forgive me for seeming overly simplistic. That seems like a drop in the bucket compared to the overall commitment to the entire program.

Admiral MULLOY. Yes, sir, but once again it comes back to being this is in the DOE budget, not the Navy side. There's three lines of operation in the Navy side—propulsion plant, missile compartment, and total submarine. Naval Reactors and NAVSEA work on the propulsion plant, but when it comes to the actual reactor core design, that's under the DOE hat that Naval Reactors has. It is under their budget. It was not even the Senate Armed Services Committee which provided this mark. I think it's the Subcommittee on Water and Power of the Senate Committee on Energy and Natural Resources mark against DOE and NNSA. In the mix of that budget, components fell on weapons and other areas.

We have been attempting with the Office of Management and Budget (OMB) and DOE to say, this is an impact. They're saying, we're losing money on all of our programs.

Senator BLUMENTHAL. Isn't this point a weakness in the authorization or appropriation process, to potentially put the entire ORP, at risk because of this anomaly or idiosyncrasy in budgeting?

Admiral MULLOY. Sir, it also goes all the way back to the Atomic Energy Act of 1947.

Senator BLUMENTHAL. I understand that it has its origins in a whole bunch of history and procedure and so forth.

Admiral MULLOY. Right.

Senator BLUMENTHAL. I'm looking at it from the taxpayers' standpoint. I'm assuming you'd agree we need the ORP.

Admiral MULLOY. Yes, sir.

Senator BLUMENTHAL. We need it on time and hopefully under budget, as our submarine-building program has done. I'm not meaning to put you in defense of a procedure that is anomalous and maybe irrational, but that may be something we need to change.

Admiral MULLOY. Sir, I'd have to really get Admiral Richardson to come back and talk to you. There are interstitials of this entire budget. This is a problem for us. That's why I've gone to OMB and OSD Comptroller myself, and the SECNAV has gone to the Secretary of Energy. There are discussions going on about how can we recover it, but it's not a matter as simple as—I can't as the Navy budget officer write them a check, under fiduciary law of the United States of America. We need to have them try to solve that.

There are many other consequences where DOE has been able to lead and keep reactor plants going long-term along with nuclear fuel. It's a very intertwined area. We need to be careful about fixing one thing that could have tremendously unintended consequences across the full spectrum of our relationship with the nuclear industry, sir.

Senator BLUMENTHAL. Thank you.

Secretary Stackley, moving to helicopters, I understand that the Navy—again, I'm going to put it in probably oversimplified terms—is considering declining to order or buy about 29 UH-60M aircraft; is that correct?

Mr. STACKLEY. That's approximately correct. The Navy buys H-60 aircraft off of the Army multi-year contract. Part of this is tied to the same issue associated with the aircraft carrier. If we're down a carrier, if we're down an air wing, then there's some number of helicopters that are affected by it.

Our last year's procurement in that multi-year is 2016 and today the budget reflects zero Navy aircraft in 2016. It would be a reduction of 29.

Senator BLUMENTHAL. Have you considered what the cost will be in adding to the ultimate procurement expense involved?

Mr. STACKLEY. We're reviewing that right now. There are estimates today that range from various factors to the Navy's share of an ultimate production shutdown, to termination liability for any material that was procured earlier on that's associated with the multi-year, to unit cost impacts to the Army aircraft. I've had a first round with the Naval Air Systems Command as well as the program executive offices and I've sent them back with a lot of analysis that I need to back up the numbers.

Senator BLUMENTHAL. Even with the changes that you describe in the aircraft carrier, won't there still be a need for the 11 frigates to have helicopters?

Mr. STACKLEY. Our inventory for H-60s, if you pull the carrier out of the equation, our inventory for H-60s is very healthy right now.

Joe, do you want to add to that?

Admiral MULLOY. Sir, we're going to have to analyze that in light of the cruisers, the LCS discussion, and the carrier. Once again, the commitment is if we go down in 2016 and we're appropriated above that level, we will finish the plan of record, which was the helicopter buy, the carrier, and all the other ships. If we are not at that position, then we would have to come back in a 2016 sequester plan to figure out what is the total size of the Navy and where the helicopters go.

They're all intertwined in this whole discussion of the 2016 and out laydown of the size of the Navy and these various platforms. But we are taking advantage of a tremendous price buying on this Army one to buy a lot of helicopters. But it was clear that the Navy would still always have shutdown costs. What it was, we are taking into account what the liability is of buying less than we initially thought.

I was the budget officer for 4½ years before I came into this job. I dealt with the largest budget the Navy's ever had. I'm dealing with the single largest dropdown in a short period even compared to the 1990s when I worked in the budget office before it was back in the fleet again. These are dramatic times and we're weighing all the cost, as I work with Mr. Stackley, of hard decisions versus what will be the size of the Navy and what do we have to retain.

Senator BLUMENTHAL. Do you have any idea when you'll finish this analysis?

Admiral MULLOY. This will be part of the 2016 budget, sir.

Senator BLUMENTHAL. Thank you.

Senator REED. I had the opportunity of a second round and so did Senator Sessions. I would invite any of my colleagues to take a second round or ask additional questions. Senator King, please.

Senator KING. Secretary Stackley, I certainly don't want to make extra work for you, but—I'm sure you're thinking uh-oh. I think something that would be really helpful to this subcommittee, because this is complex and these decisions are all interrelated and very difficult, but we're dealing with our colleagues on the issue of the sequester and the effect of what happens in 2016 and then 2017 and on out. To the extent you are able, if you can tell us what that means in terms of ships that would be very helpful. In other words, instead of us just saying to our colleagues it'll affect the shipbuilding budget, it would be scary, but helpful. You indicated that there's been additional analysis done. But I think it would be very helpful to the subcommittee if we could say, okay, if we have the full sequester as currently scheduled, here is what we would have to cut back; if we have a partial relief from the sequester, say half, here's what we could do.

It would help us to put a real face on the sequester in terms of discussing it with our colleagues and what the impacts would be. I realize it's somewhat speculative, but if you could give us your

best analysis right now, here's what would happen starting in 2016 and this is where we would have to go to reduce these expenditures.

The President's budget is fine. We would all like to see that increase. But I don't know if that's going to happen. I want to play center field for the Red Sox, too. I'm not sure that's going to happen. We really have to have alternatives of what the concrete effect would be of different levels of sequester relief, including zero relief.

Mr. STACKLEY. Yes, sir. Let me bracket the problem a bit. We'll just start with three cases. The first is the budget that we've submitted, the second is the BCA, and then the third case pivots around the ORP. There's been discussion with Congress in various hearings and things about the significance of that single program on the shipbuilding budget from about the 2020 through 2035 period, and there's discussion of what if that was partially funded from some other source. I'm not suggesting that that's the outcome, but that's one of the scenarios that we looked at.

In the best case, if you look at historically where we've been over the last handful of years, we have invested about \$13 billion a year into new ship construction. The budget that we've submitted supports the 306-ship Navy. We get there about the end of the decade. Then, even in the period of the ORP, in the long-term view, which is beyond the budget, where we assume additional increases to our budget for shipbuilding, then we sustain a 300-plus ship Navy throughout that period.

If you then constrain that to BCA level and say, we're going to keep it at the BCA level and then escalate it on out beyond and no additional relief associated with the ORP, then that 300-plus type of force, you look out in the out-years—not in the 2020s, because we start with a large force. But over time, as you decommission and as your ship count draws down, at the end of the 30-year period you're down to about a 240-ship Navy.

It would be a gradual reduction from today, where we're in the 280s. We're at 289 ships by the current method of ship counting. We get up to 300-plus by the end of the decade, and then in 2016, as we described earlier, the budget reduction's impact upon the new construction and the numbers—if you keep the numbers capped at about that \$13 billion number associated with, and then lay in the BCA, you go down to 240 ships.

If, in fact, during the period of the ORP there was some other strategic fund that covered the cost of the ORP or there was some relief to the top line for shipbuilding, then we're in much better shape. Then we're in the 280s range in terms of a long-term force structure.

That tends to bracket the discussion. Now, let's lay a couple of other factors in. The ORP under all circumstances is going to be a top priority. We have a reasonable estimate right now for what that program's going to cost. We know when it's going to be laid in. Whatever you assume for your top line, that's the first layer of bricks, the carriers.

Carriers. One carrier every 5 years nominally to support the carrier force structure, that's about a \$2 billion plus bill. You can lay that in.

*Virginia*-class submarines. When we look at requirements in terms of force structure, we know already that we're going to have a shortfall. Under all scenarios we're going to have a shortfall of submarines in the back end of the 2020s. We need to sustain about a one and a half *Virginia*, per-year rate, long-term, to maintain a 48-boat force.

In terms of priorities, you're going to see a priority laid in for *Virginia*. Now, we're not going to be able to sustain a two *Virginia* per-year rate under any circumstance, with the ORP. That's going to be throttled some, but that would be the next tier you start to see in. That's where it gets very difficult because now you're looking at surface combatants, you're looking at the amphibious force that we've already discussed in terms of our current shortfall to amphibious lift.

The bottom line is that at BCA level through the 2023 period, you assume that the Navy's going to fund the full cost of the ORP construction, which is the baseline assumption. We're looking at four, plus or minus, additional ships per year other than—

Senator KING. Of all types?

Mr. STACKLEY. Of all types.

—the ORP and the carrier, the carrier every 5 years, during that 15-year window. That's what drives your numbers.

Now, to get into the specifics in terms of how many destroyers, which year, when would the next big deck be, you can move those things around with assumptions. But when you just grasp what that means—ORP, carrier every 5 years, and then four, plus or minus, ships per year otherwise—you are entirely reshaping our Navy's force structure and with that what the Navy can do for the Nation.

Senator KING. Thank you. It's sobering and straightforward. I appreciate that.

Senator REED. Thank you very much, Senator King. Thank you to my colleagues.

I want to first cite the witnesses for their very insightful and very articulate testimony, and for their incredible service to the Nation. Thank you so much.

I think Senator King raised a very important question and your response was very helpful. If you have the ability to generate the scenarios—I assume, like every organization, you'll have a plan A, a plan B, and a plan C. Whenever that might be ready for prime time, you could share it with us.

A final point and just the impression that I've had, and I think it reflects something Senator McCain said, is that there's always the debate whether budgets drive strategy or strategy drives budgets. We spent the whole afternoon talking about budgets, basically, not strategy, not threats, not the future. But I think we have to recognize, and Senator McCain suggested this, that we might be at an inflection point, because the permissive environment that has been the assumption of a lot of our shipbuilding and platforms of all varieties that we can go anywhere and do anything because the other folks don't have the technology and there's a huge gap, that is rapidly changing. That has huge strategic implications. That's another factor you have to build into your discussions.

I think it is interesting to note that this whole conversation this afternoon has been dominated by budgets, not by emerging threats, strategies, new technologies, et cetera. We have to remember that, too. In fact, my sense is it's becoming more of an issue each day rather than less of an issue.

Let me suggest that the hearing record will remain open until April 16th, next Wednesday. If there are additional statements for the record from the witnesses, please submit them. To my colleagues, if anyone has any written questions, we'll get those from you and provide them to the witnesses before the 16th or on or about. We'd ask for your prompt responses.

I would thank the witnesses for appearing here today and for their service to the Navy and the Nation.

If there are no further comments or questions, this hearing is now adjourned.

[Whereupon, at 4:23 p.m., the subcommittee adjourned.]

[Questions for the record with answers supplied follow:]

#### QUESTIONS SUBMITTED BY SENATOR RICHARD BLUMENTHAL

##### MH-60R HELICOPTER

1. Senator BLUMENTHAL. Secretary Stackley, the Navy is considering ending its buy of the highly praised MH-60R helicopter after this year's purchase, which would leave the Navy 29 aircraft short of its requirement and would break the current H-60 multi-year procurement (MYP) contract. What is the termination liability of such a move, and what are the effects this will have on the price of the Army UH-60M aircraft for next year if the multi-year is broken?

Mr. STACKLEY. The potential cancellation of the final 29 U.S. Navy aircraft on the H-60 MYP contract is contingent upon final determination regarding CVN-73 refueling and complex overhaul (RCOH). If it is determined that due to sequestration of the defense budget in 2016 and later years that the RCOH cannot be afforded, then the requirement for the associated air wing (which includes the requirement for the subject 29 MH-60Rs) would be retired. Actual costs associated with this potential cancellation have not yet been determined and will be calculated in accordance with Federal Acquisition Regulations once official notification of cancellation is completed. Potential cost increases, if any, to fiscal year 2015 planned procurements have not been determined. The official cancellation would occur as a result of the fiscal year 2016 appropriations and authorizations acts, if the advance procurement proposed in President's fiscal year 2015 budget request is approved.

2. Senator BLUMENTHAL. Secretary Stackley, does there not remain an unfulfilled helicopter requirement for the 11 frigates retained by the Navy?

Mr. STACKLEY. The remaining frigates are scheduled to be decommissioned no later than September 2015. There are sufficient helicopters to support frigates until they are retired.

3. Senator BLUMENTHAL. Secretary Stackley, even with the proposed cut of Littoral Combat Ship (LCS) purchases from 52 to 32 platforms, won't there still remain a requirement for the MH-60R helicopter aboard whatever platforms are determined to replace them?

Mr. STACKLEY. Yes. The capabilities that the MH-60R brings to anti-submarine warfare, anti-surface warfare, and intelligence, surveillance, and reconnaissance (ISR) will continue to be vital requirements for both LCS and follow-on small surface combatants (SSC). Navy will continue to align MH-60R procurement to overall Navy force structure—the required quantity of helicopters is also tied to our total number of carrier air wings, cruisers, destroyers, and SSCs.

4. Senator BLUMENTHAL. Secretary Stackley, will this cut of 29 helicopters have a negative effect on the Navy's operational capability?

Mr. STACKLEY. The potential reduction to the Navy's MH-60R inventory would come as a result of a determination that the CVN-73 RCOH is not affordable within a sequestered budget. Under that circumstance, the reduction to the number of

Navy aircraft carriers and associated airwings would, in fact, have a negative effect on the Navy's operational capability.

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QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

NAVY 30-YEAR SHIPBUILDING PLAN

5. Senator MCCAIN. Secretary Stackley, section 231 of title 10 requires the Secretary of Defense to submit to Congress a 30-Year Plan for the Construction of Naval Vessels when the President submits an annual budget. When will the plan be submitted?

Mr. STACKLEY. The Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for fiscal year 2015 is currently being coordinated at senior levels and will be delivered soon. Associated data tables were provided with the budget.

6. Senator MCCAIN. Secretary Stackley, I understand the Navy has changed the methodology for counting ships. Can you explain why this change was made and state what the fleet size would have been under last year's methodology versus the revised methodology?

Mr. STACKLEY. The new counting methodology allows ship types routinely requested by the combatant commanders and allocated through the Global Force Management Allocation Plan (GFMAP) to be counted on a case-by-case basis with the recommendation of the Chief of Naval Operations (CNO) and approved by the Secretary of the Navy. This will be a temporary authorization to include these ships in the ship count and will remain in effect until the ships are no longer requested in the GFMAP or are retired (whichever occurs first).

Under the new counting methodology, the battle force will be 284 ships at the end of fiscal year 2015 and 309 ships at the end of fiscal year 2019. Under the previous counting rules the overall battle force inventory would have been 274 ships at the end of fiscal year 2015 and 301 ships at the end of fiscal year 2019.

MEETING AND SUSTAINING THE FLEET SIZE GOAL OF 300 SHIPS

7. Senator MCCAIN. Secretary Stackley, what average level of investment do you need over the next 10 years, the next following 10 years, and the 10 years after that to meet your shipbuilding goals?

Mr. STACKLEY. Based on the cost of ships today, using current industrial base capacity and pricing, we project that the required average annual budget for new ship construction for the near-term planning years of fiscal years 2015 to 2024 will be approximately \$15.7 billion per year using fiscal year 2014 constant dollars. During the mid-term planning period (fiscal year 2025 to fiscal year 2034), the average budget will be approximately \$19.7 billion per year, due in large part to ballistic missile submarines (SSBN) recapitalization. In the far-term planning period (fiscal year 2035 to fiscal year 2044), the average budget will be approximately \$14.6 billion per year.

Over the entire 30-year planning horizon of the shipbuilding plan, the estimated average budget for Shipbuilding and Conversion, Navy (SCN) is approximately \$16.7 billion per year. The funding levels presented here are averages through a particular planning period. The actual cost will fluctuate as ship types of varying cost are added to and removed from the plan.

8. Senator MCCAIN. Secretary Stackley, what has been the historical SCN enacted budget as a percentage of the overall Department of the Navy enacted budget for the past 50 years?

Mr. STACKLEY. The historical SCN enacted budget, as a percentage of overall Department of the Navy enacted budget, averages 9.3 percent over the last 50 years (1965 to 2015).

REALISTIC BUDGETING FOR NEW SHIP CONSTRUCTION

9. Senator MCCAIN. Secretary Stackley, what is the total amount and percentage of the fiscal year 2015 SCN request that is for previously authorized ships? Please provide detail that is broken out among:

- a. Incrementally funded programs (indicate specific programs/amount);
- b. Cost growth on prior year programs (indicate specific programs/amount); and

c. Restoral of sequestration reductions (indicate specific programs/amount).

Mr. STACKLEY. The table below provides the SCN fiscal year 2015 President's budget request broken down in the requested categories:

SCN Line Item (Amount \$ 000)	FY15 President's Budget Request	FY15 President's Budget Request for:				Comments
		Full Funding or Advance Procurement	Incremental Funding of Prior Year Programs	Cost Growth for Prior Year Programs	Sequestration Shortfall for Prior Year Programs <sup>3)</sup>	
Carrier Replacement Program	1,300,000		1,300,000			
Virginia Class Submarine AP	2,330,325	2,330,325				
Virginia Class Submarine FF	3,553,254	3,553,254				
DDG 1000	419,532		322,054	97,478		
DDG-51 AP	134,039	134,039				
DDG-51 FF	2,671,415	2,671,415				
Littoral Combat Ship (LCS)	1,427,049	1,427,049				
LPD-17	12,565		12,565			Program Closeout Costs
LHA Replacement AP	29,093	29,093				
Joint High Speed Vessel (JHSV)	4,590		4,590			Program Closeout Costs
Moored Training Ship AP	64,388	64,388				
Moored Training Ship	737,268	737,268				
Outfitting	546,104	545,312			792	
Ship to Shore Connector	123,233	123,233				
LCAC SLEP	40,485	40,485				
Completion of Prior Year Shipbuilding Programs for:						
DDG 51 Class (FY10 and FY11)	129,144				129,144	
LPD Class (FY09)	54,096			54,096		
Joint High Speed Vessel (FY11, FY12 and FY13)	14,000			4,441	9,559	
Littoral Combat Ship (FY10 and FY11)	93,045			814	92,231	
CVN 78 (FY08)	663,000			663,000		
CVN 72 RCOH (FY12)	54,000				54,000	
<b>Total</b>	<b>14,400,625</b>	<b>11,655,861</b>	<b>1,639,209</b>	<b>819,829</b>	<b>285,726</b>	
<b>Percentage of Total SCN TOA in FY15 PB Request</b>		<b>80.94%</b>	<b>11.38%</b>	<b>5.69%</b>	<b>1.98%</b>	
<sup>3)</sup> Sequestration funded in FY15 is only part of the total sequestration shortfall. The total sequestration impact on SCN is as follows:						
	Amount (\$ 000)					
Total SCN Sequestration Shortfall	1,071,738					
Financed by:						
FY13 Above Threshold Reprogramming	239,808	22.38%				
FY14 Congressional Action (PL 113-76)	250,400	23.36%				
PB15 Request in FY15	285,726	26.66%				
PB15 Request in FY16 - FY18	295,804	27.60%				
Total Financing	1,071,738					

#### OHIO REPLACEMENT PROGRAM

10. Senator McCAIN. Secretary Stackley, for the *Ohio* Replacement Program, what is the specific amount of the fiscal year 2015 National Nuclear Security Administration (NNSA) funding shortfall?

Mr. STACKLEY. Naval Reactor's Department of Energy (DOE) funding was reduced by \$151 million in fiscal year 2014. As a result of that funding shortfall, there was insufficient funding to support a planned procurement (\$11 million) for high performance computers (HPC) that are necessary to complete the reactor design for the



*Ohio* Replacement as well as support fleet operations. As a result, the *Ohio*-class replacement reactor core design is expected to be delayed by 6 months if funding is not restored.

Naval Reactors is working with DOE on a path forward that will provide resources to procure the computers this year. If that proves unsuccessful, Naval Reactors will reprioritize fiscal year 2015 resources at the decrement of other requirements to procure HPCs, dependent upon their fiscal year 2015 appropriation level. If the HPC procurement can take place by the beginning of fiscal year 2015, the impact to *Ohio*-class replacement can be minimized.

11. Senator McCAIN. Secretary Stackley, is the shortfall manageable during execution, and why or why not?

Mr. STACKLEY. Naval Reactors is working with DOE on a path forward that will provide resources to procure the computers this year. If that proves unsuccessful, Naval Reactors will reprioritize fiscal year 2015 resources at the decrement of other requirements to procure HPCs, dependent upon their fiscal year 2015 appropriation level. If the HPC procurement can take place by the beginning of fiscal year 2015, the impact to *Ohio*-class replacement can be minimized.

12. Senator McCAIN. Secretary Stackley, what is the impact to the *Ohio* ship construction program if this shortfall is not resolved during fiscal year 2015?

Mr. STACKLEY. Naval Reactor's DOE funding was reduced by \$151 million in fiscal year 2014. As a result of that funding shortfall, there was insufficient funding to support a planned procurement (\$11 million) for HPCs that are necessary to complete the reactor design for the *Ohio* Replacement as well as support fleet operations. If the shortfall is not resolved, the *Ohio*-class replacement reactor core design will be delayed by 6 months.

13. Senator McCAIN. Secretary Stackley, what are you planning to do to mitigate that impact?

Mr. STACKLEY. Naval Reactors is working with DOE on a path forward that will provide resources to procure the computers this year. If that proves unsuccessful, Naval Reactors will reprioritize fiscal year 2015 resources at the decrement of other requirements to procure HPCs, dependent upon their fiscal year 2015 appropriation level. If the HPC procurement can take place by the beginning of fiscal year 2015, the impact to *Ohio*-class replacement can be minimized.

14. Senator McCAIN. Secretary Stackley, what is the estimated SCN advance procurement funding by fiscal year that is needed to support the lead ship procurement in fiscal year 2021?

Mr. STACKLEY. The estimated SCN advance procurement requirements to support lead ship detail design efforts as well as long lead time material procurements in the Future Years Defense Program (FYDP) are identified below.

	Fiscal Year				FYDP Total
	2016	2017	2018	2019	
SCN Advance Procurement (TY\$M) .....	\$13.2	\$777.8	\$791.8	\$2,887.9	\$4,470.7

15. Senator McCAIN. Secretary Stackley, would you please break the advance procurement amount out by nuclear and non-nuclear costs?

Mr. STACKLEY. The nuclear and non-nuclear FYDP SCN advance procurement funding requirements for the lead ship are estimated below. These requirements support lead ship detail design efforts as well as lead ship government-furnished equipment procurement.

TY\$,B	FYDP Total
Nuclear Costs .....	\$2.69
Non-nuclear Costs .....	1.78
Total .....	\$4.47

16. Senator McCAIN. Secretary Stackley, what is the then-year full-funding amount for the lead ship (fiscal year 2021) and what is the projected then-year end-cost of the lead ship?

Mr. STACKLEY. The total SCN funding requirements for the lead ship are estimated to be:

	Total (TY\$B)	Total (CY10\$B)
SCN FF (fiscal year 2021) .....	\$10.06	\$ 6.70
SCN Advance Procurement (fiscal year 2016 to fiscal year 2020)* .....	5.81	4.34
SCN End Cost .....	15.87	11.04
Recurring .....	10.03	6.76
Non-recurring .....	5.84	4.28

\*These requirements support lead ship detail design efforts as well as long lead time material procurements.

#### DDG-51 FLIGHT III

17. Senator McCAIN. Secretary Stackley, would you please explain how the DDG-51 MYP is planned to be executed with respect to the introduction of Flight III?

Mr. STACKLEY. The DDG-51 Flight III is planned to be introduced on the second fiscal year 2016 ship and both fiscal year 2017 ships of the fiscal years 2013 to 2017 DDG-51 Flight IIA MYP. The current MYP is for Flight IIA ships as directed by the National Defense Authorization Act (NDAA) for Fiscal Year 2013, section 123. The Flight III will be introduced as a fixed price engineering change proposal (ECP) that will be competed between the two DDG-51 shipbuilders to determine which shipyard will have the lead for incorporating the air and missile defense radar (AMDR) along with associated power and cooling modifications to the ship. The Flight III schedule is on track as preliminary design completed in mid-fiscal year 2014, contract design is currently in progress, and detail design is scheduled to commence in the fourth quarter of fiscal year 2014. The Navy will evaluate maturity of design and readiness to proceed, and report to the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) and Congress when the Flight III design and production are ready for introduction aboard these ships.

18. Senator McCAIN. Secretary Stackley, is Flight III considered a part of the MYP by the Navy?

Mr. STACKLEY. No. The DDG-51 fiscal years 2013 to 2017 MYP consists only of Flight IIA ships as directed in the NDAA for Fiscal Year 2013, section 123, that grants the MYP authority. The Flight III destroyer will be introduced as a separately competed, fixed price ECP that incorporates the AMDR and the associated power and cooling modifications to the ship.

19. Senator McCAIN. Secretary Stackley, if separate, why would the Navy not execute a full 10-ship MYP vice a 7-ship MYP?

Mr. STACKLEY. The Navy has already completed the MYP contract award of 10 DDG-51 Flight IIA ships in fiscal years 2013 to 2017 that was described in the USD(AT&L) approved acquisition strategy dated June 2012 and authorized by Congress in the NDAA for Fiscal Year 2013, section 123. The incorporation of the Flight III ECP will proceed based on maturity of design and thus our ability to compete this as a fixed price ECP. The Navy has a successful track record of incorporating combat system upgrades in the course of prior DDG-51 multiyear contracts and will adhere to the same standards with this upgrade.

20. Senator McCAIN. Secretary Stackley, can additional MYP savings be attained if Flight III procurement is delayed until cut in on the fiscal year 2018 ships and a subsequent authorized MYP, and if so, how much?

Mr. STACKLEY. Delaying the introduction of Flight III does not produce additional MYP savings. The Navy has already completed the MYP contract award of DDG-51 Flight IIA ships for fiscal years 2013 to 2017 that was described in the USD(AT&L) approved acquisition strategy dated June 2012, and authorized by Congress in the NDAA for Fiscal Year 2013, section 123. The Flight III ECPs will not affect those already achieved savings. The ECP will be competed as a fixed price mod following a successful critical design review to ensure maximum affordability.

While the introduction of any new technology involves risk, no contractual commitment in advance of appropriations will be used to execute these ECPs. The ECPs

will be annually funded. The additional technical risk of incorporating the new radar capability is warranted because the ships will deliver a significant increase in integrated air and missile defense capability. The ECP uses the most efficient method to introduce this capability while minimizing risk and potential cost growth. The DDG-51 Flight III capability consists of a Flight IIA ship which changes the SPY-1D(V) radar to the AMDR along with the associated changes to power and cooling.

#### VIRGINIA PAYLOAD MODULE

21. Senator MCCAIN. Secretary Stackley, what is the current design maturity of the *Virginia* payload module (VPM)?

Mr. STACKLEY. Initial concept development for VPM is complete. The concept leverages existing technology, previous Navy experience with lengthening submarines, and the modular *Virginia*-class design. Necessary modifications and additions to ship systems can be accomplished with existing components. For example, VPM tubes have the same diameter (87") as the *Virginia* payload tubes (VPT) located forward of the sail in Block III and follow on Blocks. This modification has minimal cost and technical risk in terms of development and procurement, if funded to the President's budget.

The Navy has completed advanced modeling to assess the impact of the VPM on *Virginia*-class submarine performance characteristics and has determined that this modification will not prevent the ship from meeting any of its currently assigned key performance parameters. The Joint Requirements Oversight Council (JROC) has validated the requirement modification to the *Virginia*-class submarine by approving the strike capability change capability development document in December 2013.

22. Senator MCCAIN. Secretary Stackley, how much is included in development for the VPM by fiscal year through program end?

Mr. STACKLEY.

#### Non-Recurring Engineering (NRE) for VPM TY\$M through the FYDP.

TY\$M	Fiscal Year							FYDP Total
	2013	2014	2015	2016	2017	2018	2019	
VPM .....	9.0	59.1	132.6	167.7	193.9	159.5	27.9	749.7

23. Senator MCCAIN. Secretary Stackley, with additional payload capacity, will the future fleet be able to satisfy combatant command demand or will you still have a shortfall in the overall submarine fleet size?

Mr. STACKLEY. Combatant command demand is not solely driven by vertical payload capacity but rather the range of seven core missions that fast attack submarines provide. Through the GFMAP, the Navy sourced approximately 53 percent of overall combatant commander attack submarine requests in fiscal year 2014. This demand gap will continue to grow as fast attack submarine force structure shrinks from 53 to a low of 41 from fiscal years 2028 to 2030. Navy is mitigating this shortfall through three parallel efforts: continuing procurement of two *Virginia*-class submarines per year, reducing the construction span of *Virginia*-class submarines, and extending the service lives of selected attack submarines.

24. Senator MCCAIN. Secretary Stackley, how would a delay in the design of the VPM impact the Navy's ability to move forward with production on Block V in fiscal year 2019?

Mr. STACKLEY. VPM is currently on track to support Block V contracting in fiscal year 2019. If VPM design is delayed, the Navy would then evaluate which fiscal year to incorporate the VPM capability. Like the Flight III efforts on DDG-51, VPM could be introduced as a change to an existing multiyear contract. From an operational perspective, delaying the VPM effort will result in having insufficient strike volume to meet campaign requirements, an inability to enable early successful prosecution of adversary anti-access/area denial (A2/AD) networks, and will close off opportunities to significantly improve *Virginia*-class performance and capabilities against advanced adversaries.

## CVN-78 FULL FUNDING POLICY/OVERSIGHT

25. Senator MCCAIN. Secretary Stackley, does the Navy ever intend to resume complying with the longstanding full funding policy for all new construction ships?

Mr. STACKLEY. In limited instances, the Navy has requested, and Congress has authorized, incremental SCN full funding for some shipbuilding programs. The Navy is currently executing incremental SCN full funding for two new construction aircraft carriers (CVN-78 and CVN-79), two large deck amphibious assault ships (LHA-6 and LHA-7), and two aircraft carrier RCOH (CVN-71 and CVN-72).

Fully funding large capital ships such as aircraft carriers in a single year is not the most efficient and effective use of Navy's total obligation authority for shipbuilding. Using 6 years of full funding avoids funding spikes in the SCN account and allows the Navy to procure large capital ships and fund other programs concurrently in order to sustain the Navy's 30-year shipbuilding plan. Incremental funding is a more practical and effective procurement strategy to maintain a weapon system vital to the Nation's defense. The Navy will continue to request incremental full funding authority for future new construction aircraft carriers, large deck amphibious assault ships, and RCOHs.

26. Senator MCCAIN. Secretary Stackley, what is the amount needed to complete full funding for the USS *John F. Kennedy* (CVN-79)?

Mr. STACKLEY. In response to section 121 of the NDAA for Fiscal Year 2014, Navy submitted the first quarterly report on the Program Manager's estimated procurement cost of the aircraft carrier *John F. Kennedy* (CVN-79) on April 7, 2014. As stated in the report, the amount of SCN funds needed to complete the ship is \$11.498 billion, an amount equal to both the fiscal year 2015 President's budget request and the congressional cost cap for the ship established by section 121 of the NDAA for Fiscal Year 2014. Of this amount, \$4.736 billion has been provided in prior years, and \$6.762 billion remains to be appropriated in fiscal year 2015 through fiscal year 2018. The Navy is committed to stay within this funding estimate, including identifying changes to the design, to maximize the likelihood of meeting the cost cap.

27. Senator MCCAIN. Secretary Stackley, does the long-term 30-year plan show only 10 carriers at the end of the 30-year timeframe?

Mr. STACKLEY. Based on the current schedule which includes CVN-73 in the Naval battle force inventory, the aircraft carrier force structure will be restored to 11 CVNs with the projected delivery of CVN-78 in 2016. The current construction schedule for *Ford*-class carriers based on the 5-year build intervals, as depicted in the Navy's 30-year shipbuilding plan, maintains a force structure of at least 11 carriers until 2039, after which the fleet would be reduced to no more than 10 CVNs.

28. Senator MCCAIN. Secretary Stackley, is this due to only building a new carrier every 5 years instead of one carrier every 4.5 years or two every 9 years?

Mr. STACKLEY. The current construction schedule for *Ford*-class carriers based on the 5-year build intervals, as depicted in the Navy's 30-year shipbuilding plan, maintains a force structure of at least 11 carriers until 2039, after which the fleet would be reduced to no more than 10 CVNs.

29. Senator MCCAIN. Secretary Stackley, will the Navy consider employing a block buy of CVNs for the CVN-80 and CVN-81 in fiscal year 2018, and why or why not?

Mr. STACKLEY. The Navy continues to focus on affordability as we consider all options to procure future carriers. Previous Navy experience with aircraft carrier two-ship buys, procurement of the CVN-72 and CVN-73 (awarded in fiscal year 1983) and the CVN-74 and CVN-75 (awarded in fiscal year 1988), provided significant savings compared to other *Nimitz*-class single ship buys. Having both ships fully funded in a single year enabled Navy and the shipbuilder to take advantage of two ship-set economic order quantity market savings for material items, minimized fact-of-life changes between ships reducing follow ship drawing and construction costs, and also allowed the shipbuilder to optimize production trades management. The short time between deliveries also resulted in design stability, minimized potential obsolescence, and greater opportunities for learning.

The current fiscal uncertainty challenges the Navy's ability to plan and budget over the long term. However, the Navy will continue to explore the above options to the maximum extent while ensuring we sustain the Navy's 30-year shipbuilding plan.

## CVN-73 GEORGE WASHINGTON

30. Senator MCCAIN. Secretary Stackley, what is the amount required in fiscal year 2015 to support a planned fiscal year 2016 (yard induction) refueling and overhaul of the USS *George Washington*?

Mr. STACKLEY. To conduct an RCOH in fiscal year 2016, the Navy requires \$483.6 million in fiscal year 2015 SCN advance procurement funding.

31. Senator MCCAIN. Secretary Stackley, of that amount, how much is for normal advance planning and material, and how much is related to support of the nuclear cores?

Mr. STACKLEY. The Navy requires all \$483.6 million of SCN advance procurement funding in fiscal year 2015 to conduct advance planning and material procurement for CVN-73 RCOH. None of the fiscal year 2015 SCN funding is for refueling cores (reactor power units). Funding for the refueling cores is provided in Other Procurement, Navy (OPN).

32. Senator MCCAIN. Secretary Stackley, what specific ship cores are being supported with the required nuclear funds?

Mr. STACKLEY. The refueling core (reactor power unit) slated for procurement in fiscal year 2015 was not for the refueling of CVN-73, but rather for the USS *Ronald Reagan* (CVN-76) RCOH, as the manufacture and assembly time for a *Nimitz*-class refueling core is approximately 8 years. This is the first of two refueling cores required to be procured for CVN-76. The Navy requires \$298.2 million of OPN funding in fiscal year 2015 and \$231.1 million in fiscal year 2017 for procurement of these cores.

33. Senator MCCAIN. Secretary Stackley, are these funds for cores in support of the USS *John C. Stennis* (CVN-74) or the USS *Harry S. Truman* (CVN-75) or the USS *Ronald Reagan* (CVN-76), and if so, can the fiscal year 2015 nuclear core funding be deferred 1 year to help cover the immediate USS *George Washington* planning and material costs in fiscal year 2015?

Mr. STACKLEY. As indicated in Question 32, these cores are for the USS *Ronald Reagan* (CVN-76). The Navy requires \$298 million of OPN funding in fiscal year 2015 and \$321.1 million in fiscal year 2017 for procurement. The manufacture and assembly time for a *Nimitz*-class core is approximately 8 years.

Procurement of the first core in fiscal year 2016 is not viable due to vendor loading. While a delay will have some impact on the total cost of CVN-73's RCOH over the FYDP, depending on when the decision is made, the fiscal years 2016 to 2019 costs will be updated with the Navy's submission of the President's budget for 2016.

## LITTORAL COMBAT SHIP

34. Senator MCCAIN. Secretary Stackley, what are the current cost caps in fiscal year 2015 dollars for the seaframes (ships) and the mission equipment?

Mr. STACKLEY. The LCS congressional cost cap value of \$480 million when inflated from fiscal year 2009 to fiscal year 2015 dollars is \$559.8 million. The value of the cost cap includes basic construction cost, government furnished equipment, and change orders.

There is no congressional cost cap for the mission modules.

35. Senator MCCAIN. Secretary Stackley, how do those cost caps compare to the budget request?

Mr. STACKLEY. The LCS seaframe congressional cost cap value in fiscal year 2015 dollars is \$559.8 million. The average budget request for each ship in fiscal year 2015 is \$423.1 million in comparison to the cost cap. The value of the cost cap includes basic construction cost, government furnished equipment, and change orders.

The mission module program does not have a cost cap. However, the December 2013 Selected Acquisition Report states the program acquisition unit cost and average procurement unit cost are below the requirement approved in the acquisition program baseline (APB).

36. Senator MCCAIN. Secretary Stackley, what is the acquisition strategy for the LCS program in fiscal year 2015 for the three ships?

Mr. STACKLEY. The deferral of one block buy ship from fiscal year 2015 to fiscal year 2016 was a direct result of funding impacts associated with the Bipartisan Budget Act (BBA). Navy plans to procure the single LCS shifted from fiscal year 2015 to fiscal year 2016 under the current block buy contract(s) by making an ad-

justment to the terms of the block buy contracts. The adjustment to the procurement profile will be made in consultation with industry, and with consideration of cost, production schedule performance, shipyard resource loading, and vendor base considerations. Final determination will be made subject to bilateral negotiations with a focus on minimizing impact to cost by leveraging the affordability initiatives brought to the program by the block buy contracts (stable requirements, stable design, stable production schedule, skilled workforce, facility investments, long-term vendor agreements, and fixed price contracts).

37. Senator MCCAIN. Secretary Stackley, what is the cost impact to the Navy of a 3-ship procurement in fiscal year 2015 instead of a 4-ship buy to complete the planned 20-ship block buy?

Mr. STACKLEY. The deferral of one block buy ship from fiscal year 2015 to fiscal year 2016 was a direct result of funding impacts associated with the BBA. Navy plans to procure the single LCS shifted to fiscal year 2016 under the current block buy contract(s) by making an adjustment to the terms of one of the block buy contracts. The adjustment to the procurement profile will be made in consultation with industry, with consideration of cost, production schedule performance, shipyard resource loading, and vendor base considerations. Final determination will be made subject to bilateral negotiations with a focus on minimizing impact to cost by leveraging the affordability initiatives brought to the program by the block buy contracts (stable requirements, stable design, stable production schedule, skilled workforce, facility investments, long-term vendor agreements, and fixed price contracts).

38. Senator MCCAIN. Secretary Stackley, if not awarded two fiscal year 2015 ships, then is there a cost penalty the government must pay one of the two shipbuilders, or are the terms of the block buy contract simply now opened back up and subject to further negotiation?

Mr. STACKLEY. The deferral of one block buy ship from fiscal year 2015 to fiscal year 2016 was a direct result of funding impacts associated with the BBA. Under the terms of the block buy contracts, the shipbuilder not awarded two ships in fiscal year 2015, are allowed to renegotiate the terms and cost of the remaining ships. However, Navy plans to procure the single LCS shifted to fiscal year 2016 under the current block buy contract(s) by making an adjustment to the terms of one of the block buy contracts. The adjustment to the procurement profile will be made in consultation with industry, with consideration of cost, production schedule performance, shipyard resource loading, and vendor base considerations. Final determination will be made subject to bilateral negotiations with a focus on minimizing impact to cost by leveraging the affordability initiatives brought to the program by the block buy contracts (stable requirements, stable design, stable production schedule, skilled workforce, facility investments, long-term vendor agreements, and fixed price contracts).

39. Senator MCCAIN. Secretary Stackley, roughly how much additional cost exposure would the government be facing?

Mr. STACKLEY. Navy plans to procure the single LCS shifted to fiscal year 2016 under the current block buy contract(s) by making an adjustment to the terms of one of the block buy contracts. The adjustment to the procurement profile will be made in consultation with industry, with consideration of cost, production schedule performance, shipyard resource loading, and vendor base considerations. Final determination will be made subject to bilateral negotiations with a focus on minimizing impact to cost by leveraging the affordability initiatives brought to the program by the block buy contracts (stable requirements, stable design, stable production schedule, skilled workforce, facility investments, long-term vendor agreements, and fixed price contracts). The cost impact of the shift of one ship will not be quantified until approval of the acquisition strategy and subsequent engagement with industry which is expected to occur in the fourth quarter of fiscal year 2014.

40. Senator MCCAIN. Secretary Stackley, what other options are available to the government to preclude the block buy contract's terms from being reopened?

Mr. STACKLEY. The deferral of one block buy ship from fiscal year 2015 to fiscal year 2016 was a direct result of funding impacts associated with the BBA. Navy plans to procure the single LCS shifted to fiscal year 2016 under the current block buy contract(s) by making an adjustment to the terms of the block buy contracts. The adjustment to the procurement profile will be made in consultation with industry, with consideration of cost, production schedule performance, shipyard resource loading, and vendor base considerations. Final determination will be made subject to bilateral negotiations with a focus on minimizing impact to cost by leveraging the

affordability initiatives brought to the program by the block buy contracts (stable requirements, stable design, stable production schedule, skilled workforce, facility investments, long-term vendor agreements, and fixed price contracts). Minimal-to-no schedule impact is expected.

The addition of advance procurement in fiscal year 2015, to fund long lead time material associated with construction of one of the block buy ships to be deferred to fiscal year 2016, would improve the ability of the industry teams and their vendors to minimize the cost impact of delayed material buys, and ultimately reduce price to the Navy.

41. Senator MCCAIN. Secretary Stackley, what would be the impact of deferring the acquisition of the mission module equipment and instead using those funds to acquire the fourth seaframe (ship) in fiscal year 2015?

Mr. STACKLEY. Deferral of the fiscal year 2015 mission package procurements will cause a significant operational impact on deployments and would disrupt testing, training, and maintenance. There would be an insufficient number of mission packages by fiscal year 2017 to meet all integration, testing, and operational requirements. If the proposed fiscal year 2015 acquisition of 1 mine countermeasures (MCM) and 2 surface warfare (SUW) mission packages were deferred, then there would only be 14 deployable mission packages for 16 LCS ships in fiscal year 2017. Mission packages procured in fiscal year 2015 deliver in fiscal year 2017. The fiscal year 2015 President's budget request supports the Navy taking delivery of 10 SUW, 8 MCM, and 1 ASW mission package to field aboard 16 delivered LCS ships by fiscal year 2017. However, one SUW and one MCM mission package will be needed as training assets and the single ASW mission package will be an engineering development model that will be undergoing testing and certification to make it a deployable asset. Thus, the fiscal year 2015 President's budget request supports 16 deployable mission packages and 16 deployable LCS.

Delay of mission package procurement will increase the program's procurement costs. Several fixed price contracts for MCM and SUW mission systems and common equipment will be broken and need to be renegotiated, which will result in unit cost increases for all mission system procurements. For example, the \$20.4 million reduction to MCM procurement in the Joint Explanatory Statement accompanying H.R. 3547, the Consolidated Appropriations Act of 2014, resulted in a 25 percent unit cost increase for the procurement of AN/AQS-20A mine-hunting sonars (\$8.5 million to \$10.8 million).

Additionally, a halt in the acquisition of mission modules in fiscal year 2015 will stop the production lines for the Mark 46 30mm gun weapon system; SUW and MCM mission package support containers; the AN/AQS-20A mine-hunting sonar; Remote Multi-Mission Vehicle, the Mission Package Computing Environment; the Multi-Vehicle Communications Systems; and the Common Mission Package Trainer (CMPT). There will be a cost associated with the restart of each production line in fiscal year 2016. The loss of the CMPT will also delay the program's Ready for Training (RFT) date planned for fiscal year 2017.

42. Senator MCCAIN. Secretary Stackley, would deferring mission equipment 1 year provide more time to complete equipment testing, reduce program concurrency, and address concerns raised by the Government Accountability Office (GAO)?

Mr. STACKLEY. Deferral of mission equipment is not required to complete equipment testing. In fact, a 1-year delay to procurement of LCS mission packages will disrupt testing, training, and maintenance, while also having a significant operational impact on deployments. A 1-year deferral of mission equipment procurement would result in an insufficient number of mission packages by fiscal year 2017 to meet all integration, testing, and operational requirements. Further, a delay will result in additional cost to the Mission Modules program.

#### *Operational Impact*

If the fiscal year 2015 acquisition of 1 MCM and 1 SUW mission package were deferred, then there would only be 14 deployable mission packages for 16 LCS ships in fiscal year 2017. Mission packages procured in fiscal year 2015 deliver in fiscal year 2017. The fiscal year 2015 President's budget request supports the Navy taking delivery of 10 SUW, 8 MCM, and 1 ASW mission package to field aboard 16 delivered LCS ships by fiscal year 2017. However, one SUW and one MCM mission package will be needed as training assets and the single ASW mission package will be an engineering development model that will be undergoing testing and certification to make it a deployable asset. Thus, the fiscal year 2015 President's budget for LCS supports 16 deployable mission packages and 16 LCS ships.

### *Testing*

Mission package testing has proceeded according to schedule, although unplanned budget reductions remain the largest risk to successful execution of the program of record. For example, the rescission of fiscal year 2012 RDT&E.N in fiscal year 2013 caused the delay of initial operational test and evaluation (IOT&E) of Increment One of the MCM mission package from fiscal year 2014 to fiscal year 2015. The Navy reported this impact in its second, third, and fourth LCS Mission Modules Quarterly Reports to Congress, submitted in June 2013, November 2013, and February 2014, respectively.

### *Concurrency*

The LCS Mission Modules program is structured to deliver increased capability, in planned increments over time. Mission systems are developed and fielded on schedule. This is not concurrency, as future increments do not add risk to earlier increments. The program's modular approach to design allows the integration of new mission systems without disturbing the existing design or revising previously completed work. For example, the design of the Increment One MCM mission package, which is on track for operational test next year, will be in no way impacted by the integration of the Coastal Battlefield Reconnaissance and Analysis (COBRA) system, being introduced in MCM mission package Increment Two.

### *Increased Cost*

Delay of mission package procurement will increase the program's procurement costs. Several fixed price contracts for MCM and SUW mission systems and common equipment will be broken and will need to be renegotiated, which will result in unit cost increases for all mission system procurements. For example, the \$20.4 million reduction to MCM procurement in the report for the Consolidated Appropriations Act of 2014 resulted in a 25 percent unit cost increase for the procurement of AN/AQS-20A minehunting sonars (\$8.5 million to \$10.8 million).

Additionally, halting the acquisition of mission packages in fiscal year 2015 will stop the production lines for the Mark 46 30mm gun weapon system, SUW and MCM mission package support containers, the AN/AQS-20A minehunting sonar, Remote Multi-Mission Vehicle, the Mission Package Computing Environment, the Multi-Vehicle Communications Systems, and the CMPT. There will be a cost associated with the restart of each production line in fiscal year 2016. The loss of the CMPT will also delay the program's RFT date planned for fiscal year 2017.

43. Senator MCCAIN. Secretary Stackley, is the Navy planning to compete and down select to one builder for ships LCS-25 to LCS-32?

Mr. STACKLEY. Navy's acquisition strategy for LCS-25 to LCS-32 is still under development and will take into consideration the cost, production schedule performance, shipyard resource loading, and vendor base. Additionally, the acquisition strategy will take into account the results of the Small Surface Combatant Task Force (SSCTF) study to support the future procurement of a more capable and more lethal SSC and will consider options for a completely new design, existing ship designs (including LCS), and a modified LCS.

44. Senator MCCAIN. Secretary Stackley, when will Congress be advised on the Navy's proposed acquisition plan for those ships?

Mr. STACKLEY. Navy's acquisition strategy for LCS-25 to LCS-32 is still under development and will take into consideration the cost, production schedule performance, shipyard resource loading, and vendor base. The acquisition strategy will be dependent upon the outcome of the fiscal year 2015 budget and subsequent development of the fiscal year 2016 President's budget submission. Additionally, the acquisition strategy will take into account the results of the SSCTF study to support the future procurement of a more capable and more lethal SSC which will consider options for a completely new design, existing ship designs (including LCS), and a modified LCS. The results of the SSCTF will be available as part of the fiscal year 2016 budget submission.

45. Senator MCCAIN. Secretary Stackley, when is Congress likely to be advised of the Navy/Department of Defense (DOD) LCS program reevaluation?

Mr. STACKLEY. DOD has directed that no new contract negotiations beyond 32 LCS will go forward until Navy submits alternative proposals to procure "a capable and lethal SSC." Navy has been directed to consider options including "a completely new design, existing ship designs (including LCS), and a modified LCS."

In response to DOD direction, the SSCTF was established in mid-March 2014. The primary objective of the SSCTF is to develop and evaluate alternative ship de-



sign concepts for a capable and lethal SSC to inform Navy decisions regarding plans for SSCs. These concepts are to be developed consistent with the Force Structure Assessment and emerging threat environment and include top level requirements, system performance, costs, and schedule for each. The SSCTF consists of seasoned naval operators, engineering and technical experts, and acquisition professionals.

As part of the SSCTF efforts, Navy issued two Requests for Information (RFI) in order to both solicit industry's ideas and access current market information in light of the SSCTF's mission to examine potential alternatives for a SSC. The first RFI requested information regarding mature ship design concepts for SSCTF consideration. The second RFI requested information on systems and technologies that provide alternative solutions to more affordably meet future SSC capability needs. This information will be used to assess the range of feasible alternatives for consideration and to understand the performance, design, and cost implications of each. The information obtained through this market survey will provide the SSCTF insight into industry concepts and ideas as well as a means to assess the technical feasibility and costs associated with pursuing SSC alternatives.

In addition to industry engagement, the SSCTF is actively engaging fleet to solicit their current views on the missions, capabilities, and operational concepts needed for future SSCs. SSC workshops are currently planned in fleet concentration areas as well. Specific information and insight to be gained from these events include operator and planner perspectives regarding mission needs, capability requirements, and the relative value of mission and capability requirements for future SSCs. The SSCTF findings will be made available to Congress as part of the fiscal year 2016 budget submission.

46. Senator McCAIN. Secretary Stackley, where does the Navy stand in terms of addressing concerns raised by GAO?

Mr. STACKLEY. Two recent GAO reports raised several concerns with respect to LCS:

1. GAO Report 121166 (Littoral Combat Ship: Additional Testing and Improved Weight Management Needed Prior to Further Investments).
2. GAO Report 13-530 (Navy Shipbuilding: Significant Investments in the Littoral Combat Ship Continue Amid Substantial Unknowns about Capabilities, Use, and Cost).

GAO Report 121166 recommends that:

Prior to awarding ship contracts beyond the block buy both LCS classes should:

- a. Deploy to a forward overseas location;
- b. Complete rough water, ship shock, and total ship survivability testing; and
- c. Complete initial operational test and evaluation of SUW mission package on *Freedom*-class and the MCM mission package on *Independence*-class.

Prior to contracting for ships in fiscal year 2016 and later, the LCS program will have completed two deployments of *Freedom*-class and will have completed extensive operation of *Independence*-class as the ship will be preparing to deploy in fiscal year 2016. The program will have achieved initial operational capability (IOC) as well as having completed several of the required mission package IOT&E on both classes.

To date, USS *Freedom* (LCS-1) deployment is complete and lessons learned are applicable to both classes. In addition, any remote support requirements unique to USS *Independence* (LCS-2) are well understood and have been largely validated during 2 years of experience operating "out of area" during MCM mission package testing in the Gulf of Mexico (2010 to 2012). The LCS-3 deployment is planned for later this year and the *Independence*-class will deploy in the early fiscal year 2016 timeframe.

With respect to testing, the *Independence*-class rough water trials are complete and total ship survivability testing will be completed aboard USS *Fort Worth* (LCS-3) in late fiscal year 2014 followed by USS *Coronado* (LCS-4) in late fiscal year 2015. USS *Fort Worth* (LCS-3) completed ship and SUW IOT&E testing on April 17, 2014. USS *Coronado* (LCS-4) will complete SUW IOT&E testing for *Independence*-class in July 2015 followed by MCM IOT&E on USS *Independence* (LCS 2) in August 2015.

GAO Report 13-530 recommends that:

1. For LCS-25 and beyond, that Navy only procures the minimum quantity and rate of ships required to preserve the mobilization of the production base until successful completion of the full-rate production decision review.

2. Prior to the full-rate production decision and award of any additional ship contracts, Navy should report to Congress on relative advantages of each ship class for each of the three mission areas.
3. The APB submitted for the mission modules Milestone B establishes program goals for cost, schedule, and performance for each phase per current DOD acquisition policy.
4. Navy ensure the purchase of mission modules not outpace key milestones, and buy only the minimum quantities of mission module systems required to support operational testing.

The competitive pricing achieved in the LCS block buy is resulting in fiscal year 2015 ships being awarded at nearly half the price of their first of class predecessors. Reductions to the number of LCS procured in fiscal year 2015 (beyond those required as a result of the BBA), will delay the delivery of much needed capability to the fleet and increase overall costs to the Navy as a result of significant impact to shipyard efficiencies and serious impacts to the industrial base including sub-tier suppliers. In short, any further reduction to the program will cause the Navy to fall short of the required force structure of 52 SSCs and the competitive block buy pricing would be lost.

The Defense Acquisition Board, chaired by USD(AT&L), will review the program prior to the next ship procurement. With respect to establishing program goals, the entire program, as defined by the JROC-approved LCS Flight 0+ CDD, consists of a single increment for the purposes of DOD 5000.02. The nine mission package increments (four MCM, four SUW, one ASW) represent time-phased fielding of capability. The major systems that comprise mission packages are established as individual programs, with their own APBs including cost, schedule, and performance objectives and thresholds. One APB for the entire mission modules program, which integrates these programs for LCS, is appropriate and compliant with law, regulation, and policy. The APB will include well-defined, quantitative cost, schedule, and performance thresholds and objectives for the mission modules. This is similar to the approach used for other programs which provide time-phased capability for platforms. The time-phased fielding of capability and the associated performance metrics to conduct testing against will be defined in the Capability Production Documents currently under development for each mission package increment.

DOD agrees that LCS mission module procurements should not outpace delivery of LCS ships. To keep pace with LCS ships currently under contract or remaining under the current block buy through fiscal year 2015, Navy must procure mission packages at a rate necessary to support: (1) developmental and IOT&E of the two LCS classes; (2) developmental and operational testing of each incremental mission module capability as it is integrated and fielded; (3) fleet training needs; and (4) operational LCS units with the tailored capabilities required for ship deployments. Navy conducted a Quick Reaction Assessment prior to the deployment of USS *Freedom* (LCS-1) and plans to conduct IOT&E of mission modules in ships, in accordance with the approved CDD, prior to operational deployment of those capabilities.

#### AMPHIBIOUS SHIPS

47. Senator MCCAIN. Secretary Stackley, is the Navy currently assessing any plan to accelerate the construction of additional amphibious ships?

Mr. STACKLEY. The fiscal year 2015 President's budget submission includes funding for only one amphibious ship, LHA-8 in fiscal year 2017, and advanced procurement for the LX(R) program in fiscal year 2019, the replacement program for the LSD-41/49 classes of dock landing ships.

As part of the development of the fiscal year 2016 budget, the Navy will assess a number of alternatives, all of which are pre-decisional at this time. The potential for a return to sequestration-level funding in fiscal year 2016 and future years increases our risk in meeting the current and future requirements necessary to meet our missions.

48. Senator MCCAIN. Secretary Stackley, in lieu of accelerating acquisition of a \$2 billion Landing Platform/Dock (LPD) ship or a \$4 billion Landing Helicopter Dock (LHD) ship would the acquisition instead of 10 to 12 Joint High Speed Vessels (JHSV) help to more effectively close the Marine Corps' Marine Expeditionary Brigade (MEB) capability gap?

Mr. STACKLEY. JHSV was designed for intra-theater lift as a transport vessel to swiftly move marines and equipment, but not to carry them into the battle space. JHSV is not a warship. It was designed to commercial specifications to be operated

by Military Sealift Command (MSC), and as such does not have the survivability and self-defense capabilities of the Navy's LPD or LHD/LHA amphibious warships.

JHSV does not have the embarkation capacity or operational capability, even in the aggregate of 10 or 12, of an LPD or LHD/LHA. Though JHSV has a mission bay and an onloading/offloading ramp, it has no well deck for LCACs or LCUs. JHSV is incapable of the organic surface connector lift necessary to move the heavy-armored post-war (Iraq and Afghanistan) IED-hardened Marine Corps vehicles to the beach.

The acquisition of 10 to 12 JHSVs would not help to more effectively close the MEB capability gap.

49. Senator MCCAIN. Secretary Stackley, what is the status of fiscal year 2013 funds provided for 12 LPD-17-class ships?

Mr. STACKLEY. The fiscal year 2013 Continuing and Further Continuing Appropriations Act (P.L. 113-6) added \$263 million of advance procurement funding for a 12th LPD 17 amphibious transport dock ship. With the sequestration mark of approximately \$20 million, the net advance procurement appropriated for a 12th ship is \$243 million. The funds remain unobligated because there is no funding in the Navy's budget to fully fund the ship.

#### SHIP FORCE STRUCTURE

50. Senator MCCAIN. Secretary Stackley, please update the table below:

**Total number of ships in the Navy since fiscal year 1948**

<b>FY</b>	<b>Number</b>	<b>FY</b>	<b>Number</b>	<b>FY</b>	<b>Number</b>
1948	737	1970	769	1992	466
1949	690	1971	702	1993	435
1950	634	1972	654	1994	391
1951	980	1973	584	1995	373
1952	1,097	1974	512	1996	356
1953	1,122	1975	496	1997	354
1954	1,113	1976	476	1998	333
1955	1,030	1977	464	1999	317
1956	973	1978	468	2000	318
1957	967	1979	471	2001	316
1958	890	1980	477	2002	313
1959	860	1981	490	2003	297
1960	812	1982	513	2004	291
1961	897	1983	514	2005	282
1962	959	1984	524	2006	281
1963	916	1985	541	2007	279
1964	917	1986	556	2008	282
1965	936	1987	568	2009	285
1966	947	1988	565	2010	288
1967	973	1989	566	2011	284
1968	976	1990	547	2012	287
1969	926	1991	526	2013	284
			estimated	2014	282
			estimated	2015	270
			estimated	2016	283
			estimated	2017	283
			estimated	2018	291
			estimated	2019	300

Mr. STACKLEY. The table has been updated to reflect the projected battle force inventory at the end of the fiscal year for fiscal years 2014 to 2019 based on the President's budget for fiscal year 2015. The basic table (fiscal year 1948 to fiscal year 2013) is from Congressional Research Service report of April 7, 2014, on Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress, on page 39.

FY	Number	FY	Number	FY	Number
1948	737	1970	769	1992	466
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1969	926	1991	526	2013	285
			estimated	2014	290
			estimated	2015	284
			estimated	2016	290
			estimated	2017	296
			estimated	2018	304
			estimated	2019	309

#### QUESTIONS SUBMITTED BY SENATOR JEFF SESSIONS

##### LITTORAL COMBAT SHIP

51. Senator SESSIONS. Secretary Stackley, please explain what will happen to the cost of LCS if procurement is reduced.

Mr. STACKLEY. The deferral of one block buy ship from fiscal year 2015 to fiscal year 2016 was a direct result of funding impacts associated with the BBA. Any further reductions to the LCS program in fiscal year 2015 will have serious impacts to the industrial base and sub-tier vendors. The cost of the impact will not be quantified until subsequent engagement with industry which is expected to occur in the fourth quarter of fiscal year 2014. Factors that will impact ship procurement cost include renegotiation of existing pricing with shipbuilder and sub-tier vendors, lower efficiencies based on lower throughput in the construction, and higher material costs associated with lower quantity buys. Construction efficiencies can be sustained despite the deferral of one block buy ship. However, this is contingent upon the fiscal year 2016 procurement profile. Absent advance procurement funding, there will be an impact to sub-tier vendors due to delays in procurement.

52. Senator SESSIONS. Secretary Stackley, please explain your concerns about the vendor base if LCS production schedules do not remain steady.

Mr. STACKLEY. The block buy contracts include a stable procurement of two ships per year from each shipyard from fiscal years 2012 to 2015 and allow the industry teams to keep long-term vendor contracts in place providing the Navy with highly

competitive pricing for the duration of the block buy contract(s). While the Navy believes the industry teams can maintain competitive pricing on the shift of one ship from fiscal year 2015 to fiscal year 2016, the likelihood that the industry teams will be able to recreate these competitive prices as the number of ships is further reduced is low. Additionally, industry teams may lose preferred vendors completely due to the high cost to maintain production lines for low volume specialty items (like the ships reduction gears).

53. Senator SESSIONS. Secretary Stackley, what is the mission of the LCS, and please explain how it will perform as part of a larger force.

Mr. STACKLEY. LCS enables the Navy to meet presence requirements, provide warfighting response, and source the capability for contingency operations for the combatant commanders. LCS complements our inherent blue water capability and fills warfighting gaps in the littorals and strategic choke points around the world. LCS will provide a vital component of A2/AD operations, clearing mines, neutralizing enemy submarines, and protecting high value units from hostile, swarming surface craft. LCS is able to respond to threats quickly with speed, maneuverability, shallow draft, and the unique capacity to respond with a variety of networked off-board systems.

LCS is able to accomplish a broad array of missions due to the fact the ship is reconfigurable and employs tailored mission packages for SUW, MCM, or ASW missions. The modular design gives operational commanders flexibility to configure LCS to execute focused missions, as required.

LCS is a component of a balanced force, structured to defeat adversaries in times of war, and maintain a sizeable, continuous peacetime presence around the globe.

54. Senator SESSIONS. Secretary Stackley, is the Navy planning to compete and down select to one builder for ships 25 to 32?

Mr. STACKLEY. Navy's acquisition strategy for LCS-25 to LCS-32 is still under development and will take into consideration the cost, production schedule performance, shipyard resource loading, and vendor base. Additionally, the acquisition strategy will take into account the results of the SSCTF study to support the future procurement of a more capable and more lethal SSC and will consider options for a completely new design, existing ship designs (including LCS), and a modified LCS.

55. Senator SESSIONS. Secretary Stackley, when will Congress be advised on the Navy's proposed acquisition plan for those ships?

Mr. STACKLEY. Navy's acquisition strategy for LCS-25 to LCS-32 is still under development and will take into consideration the cost, production schedule performance, shipyard resource loading, and vendor base. The acquisition strategy will be dependent upon the outcome of the fiscal year 2015 budget and subsequent development of the fiscal year 2016 President's budget submission. Additionally, the acquisition strategy will take into account the results of the SSCTF study to support the future procurement of a more capable and more lethal SSC which will consider options for a completely new design, existing ship designs (including LCS), and a modified LCS. The results of the SSCTF will be available as part of the fiscal year 2016 budget submission.

56. Senator SESSIONS. Secretary Stackley, what is the status of the Navy/DOD LCS program re-evaluation?

Mr. STACKLEY. DOD has directed that no new contract negotiations beyond 32 LCS will go forward until Navy submits alternative proposals to procure a more capable and more lethal SSC. Navy has been directed to consider options including "a completely new design, existing ship designs (including LCS), and a modified LCS."

In response to DOD direction, the SSCTF was established in mid-March 2014. The primary objective of the SSCTF is to develop and evaluate alternative ship design concepts for a more capable and more lethal SSC to inform Navy decisions regarding plans for SSCs. These concepts are to be developed consistent with the Force Structure Assessment and emerging threat environment and include top level requirements, system performance, costs, and schedule for each. The SSCTF consists of seasoned naval operators, engineering and technical experts, and acquisition professionals.

As part of the SSCTF efforts, Navy issued two RFIs in order to both solicit industry's ideas and access current market information in light of the SSCTF's mission to examine potential alternatives for a SSC. The first RFI requested information regarding mature ship design concepts for SSCTF consideration. The second RFI requested information on systems and technologies that provide alternative solutions

to more affordably meet future SSC capability needs. This information will be used to assess the range of feasible alternatives for consideration and to understand the performance, design, and cost implications of each. The information obtained through this market survey will provide the SSCTF insight into industry concepts and ideas as well as a means to assess the technical feasibility and costs associated with pursuing SSC alternatives.

In addition to industry engagement, the SSCTF is actively engaging the fleet to solicit their current views on the missions, capabilities, and operational concepts needed for future SSCs. SSC workshops are currently planned in fleet concentration areas as well. Specific information and insight to be gained from these events include operator and planner perspectives regarding mission needs, capability requirements, and the relative value of mission and capability requirements for future SSCs.

57. Senator SESSIONS. Secretary Stackley, where does the Navy stand in terms of addressing concerns raised by the recent GAO weapons assessment?

Mr. STACKLEY. LCS shipbuilding process has improved and streamlined as the program matured. LCS-4 showed significant improvement from LCS-2 in level of completeness and number of high priority trial card deficiencies at delivery.

LCS-1 deployment successfully validated major portions of the LCS concept of operations for crew rotation and contracted overseas maintenance. The ship service diesel generator and lube oil cooler reliability issues were satisfactorily addressed while deployed and several engineering changes have been incorporated to prevent and mitigate similar problems in the future. Material failures of the radar were a result of a procedural error causing the system to reboot, however the radar performed to design specification. The procedures associated with the radar have been reviewed and clarified to avoid such issues in the future.

GAO assessment of program cost growth incorrectly compares the APB against a fiscal year 2004 baseline for four ships, which does not reflect the total acquisition of 52 ships in the current weapons assessment. In addition, GAO incorrectly assesses there to be excessive risk associated with mission package development and procurement because developmental testing, combined with capability proven during early deployments, has significantly reduced technical risk. Lastly, current missile procurement was delayed due to sequestration but the program is on track to deliver a capability in late 2016.

58. Senator SESSIONS. Secretary Stackley, please explain how the development and production of LCS compares to other ships, and how does the LCS compare to other ships in terms of affordability?

Mr. STACKLEY. The LCS is bringing needed capability to the fleet in an effective and affordability manner; the challenges experienced with the LCS-1 and LCS-2 development and production are similar to those of other lead ships. These early challenges are the result of the complexity of establishing a highly tailored new construction production line and unique production processes that must be established for every ship class. In addition, it can take several years before a ship is able to be fully constructed and operated at sea to completely test the ship. In order to preclude unnecessary impacts to the industrial base and provide fleet capability in a timely manner, the Navy must balance the risk of some concurrency between development and production of lead ships and production of follow ships because of the lengthy design-build timelines associated with complex naval shipbuilding.

The Navy has a proven record of consistently managing issues that occur during the construction of the lead ships, implementing improvements to follow hulls, and ensuring the ships are affordability in follow ships. For example, the *Oliver Hazard Perry*-class (FFG-7) frigates began as a clean sheet design originally conceived as a patrol frigate (PF-109). The Navy built a new hull, engineering plant, sonar, and gun. FFG-7 was thought not survivable by some and had several issues including an unreliable service diesel generator. Additionally, a major stern redesign was required in order to accommodate the new LAMPS III helicopters. Today, the *Oliver Hazard Perry*-class frigates have been in service for almost 40 years and continue to serve as a core part of the fleet. The ships continue to be operated by nine other countries.

The *Ticonderoga*-class (CG-47) Aegis cruisers were troubled with displacement and center of gravity concerns due to additional topside weight as a result of the weapon systems. There was concern that the ship would be unable to pace the carriers which the ships were designed to protect. Over time, *Ticonderoga*'s gas turbine propulsion and Aegis combat system proved to be effective systems that enable the ship to protect the carriers, and were adopted by *Arleigh Burke* (DDG-51) destroyers. With the proven propulsion and combat system, *Ticonderoga*'s addition of the

new vertical launch system strengthened it to become unparalleled at sea. Several of the *Ticonderoga*-class cruisers are being upgraded with ballistic missile defense systems in order to continue to leverage the capable platform.

Lastly, the *Arleigh Burke*-class destroyers were delayed twice before final delivery because of an immature design and the late addition of stealth characteristics. Additionally, the DDG-51 bow structure required substantial redesign after experiencing heavy weather during her maiden deployment. Once the redesign was complete, the correction required backfitting earlier ships as well as modifying inline new construction and post shakedown availability ships. The Navy currently operates 62 *Arleigh Burke* destroyers with an additional 14 ships under contract. In fact, the stability, reliability, and affordability of the DDG-51 program will allow the Navy to field an increase in ballistic missile defense capability using the AMDR as part of the Flight III upgrade.

While initially encountering some development and production issues, the LCS has become a capable, stable, and affordable warship program. The LCS program has completed the SUW mission package IOT&E and is preparing for the MCM IOT&E in fiscal year 2015. The initial design issues with the ship were resolved and the corrections are being forwardfit and backfit, as required. LCS costs are contained within fixed-price contracts and decreasing as anticipated as part of the block buy. The shipbuilders have made significant facility improvements and investments in workforce training have greatly improved efficiency in each ship's construction. The vendor base is leveraging the stability provided by the block buy contracts to drive down cost. As a result, the estimated cost of the last block buy ship at Marinette Marine Corporation and Austal USA have dropped by almost half as compared to the lead ships. Overall, the dual block buy contracts are delivering on the \$2.9 billion savings announced at award. The LCS is bringing increased capability to the fleet and adequately balances risk in an affordable and timely manner just as the Navy has with past shipbuilding programs.

59. Senator SESSIONS. Secretary Stackley, does LCS provide greater capabilities than the legacy ships it is designed to replace?

Mr. STACKLEY. The LCS equipped with a mission package will provide greater capabilities as compared to the legacy systems currently in theater.

LCS with a MCM mission package will provide a new way of conducting MCM compared to legacy ships. Through the use off-board vehicles, LCS will provide MCM capability without the need to place the ship or sailors at risk in the minefield. Additionally, LCS has vastly superior self-defense capability compared to the MCM-1 class, and will require fewer escorts to operate near mined waters.

LCS with a SUW mission package will have greater capability and capacity against highly maneuverable small surface craft including fast in-shore attack craft (FIAC) or larger fast attack craft (FAC) than legacy ships. LCS equipped with a SUW mission package is equipped with two additional 30mm gun systems in addition to the ship's 57mm gun, a package of up to 45 short-range surface-to-surface missiles, and an embarked armed helicopter. The ability of LCS to bring a combination of missiles, guns, and an aircraft launched weapons make the LCS our most lethal anti-FAC/FIAC ship with greater capacity than current surface combatants. These combined systems will provide the theater commander with greater capability and capacity than current frigates and patrol craft.

LCS with an ASW mission package, which combines the most effective anti-submarine technologies currently available, will provide greater detection capability than legacy frigates. The ASW mission systems include the multi-function towed array, the light weight tow designed for torpedo defense, the continuous active sonar/variable depth sonar, and the MH-60R helicopter armed with MK 54 torpedoes. These systems will increase force lethality against submarines at extended ranges.

LCS is designed with modularity and open architecture with documented interface control documents; therefore, the ships do not require major shipyard overhauls to upgrade combat capability as new technologies become available. Instead, these interface control documents provide the method to insert new advanced systems into the LCS mission packages and ships. In this sense, LCS not only exceeds current capabilities but has additional potential to out-pace evolving threats.



## QUESTIONS SUBMITTED BY SENATOR KELLY A. AYOTTE

## PORTSMOUTH NAVAL SHIPYARD

60. Senator AYOTTE. Admiral Hilarides, I am very proud of the skilled workers at Portsmouth naval shipyard and the essential work they do maintaining our Nation's attack submarine fleet. Based on your role as Commander of Naval Sea Systems Command, how is Portsmouth Naval Shipyard doing?

Mr. STACKLEY. In short, the shipyard is doing very well. As with the other naval shipyards, the Portsmouth Naval Shipyard workforce is dedicated to its mission of conducting the maintenance, modernization, and repair on some of the most complicated ships ever built nuclear powered attack submarines.

Along with the other naval shipyards, and the Navy as a whole, Portsmouth faced significant hardships last year: the hiring freeze, furloughs, and government shut-down. Yet, the ongoing initiatives of the shipyard workforce, designed to improve the shipyard performance, allowed them to continue their work in an effective manner.

Examples of these initiatives are evidenced by Portsmouth completing USS *Pittsburgh* (SSN-720) CNO availability on time and actually under budget. The shipyard undocked USS *Topeka* (SSN-754) on 23 April 2014, 3 weeks ahead of schedule. Additionally, Portsmouth is currently executing three CNO availabilities, each of which is tracking toward on-time and on-budget completions in the coming months. Portsmouth also completed all its assigned work for fiscal year 2013 and didn't defer any work into fiscal year 2014.

Portsmouth Naval Shipyard has a detachment in Point Loma, CA, the Portsmouth Naval Shipyard Detachment-San Diego, and it too has been a top performer—executing 52 maintenance availabilities on homeported and visiting submarines in fiscal year 2013 alone.

So, despite some real issues we all faced in fiscal year 2013, Portsmouth Naval Shipyard demonstrated that it is a top performer and I am proud to have them on the Navy Sea Systems Command (NAVSEA) Team.

## VIRGINIA-CLASS SUBMARINE PROGRAM AND THE VIRGINIA PAYLOAD MODULE

61. Senator AYOTTE. Secretary Stackley, you stated in your joint statement that the *Virginia*-class submarine program has delivered the last six ships on budget and ahead of schedule. What is the status of VPM research and development?

Mr. STACKLEY. Initial concept development for VPM is complete. The concept leverages existing technology, previous Navy experience with lengthening submarines, and the modular *Virginia*-class design. Necessary modifications and additions to ship systems can be accomplished with existing components. For example, VPM tubes have the same diameter (87") as the VPT located forward of the sail in Block III and follow on blocks. This modification has minimal cost and technical risk in terms of development and procurement, if funded to the President's budget.

The Navy has completed advanced modeling to assess the impact of the VPM on *Virginia*-class submarine performance characteristics and has determined that this modification will not prevent the ship from meeting any of its current assigned key performance parameters. The JROC has validated the requirement modification to the *Virginia*-class submarine by approving the Strike Capability Change Capability Development Document in December 2013.

62. Senator AYOTTE. Secretary Stackley, how can we ensure with the incorporation of the VPM into Block V that the *Virginia*-class program remains on budget and on schedule?

Mr. STACKLEY. Insertion of the VPM into Block V *Virginia*-class submarines will be managed so as to not result in design instability, disrupt the production line, or add cost risk. While providing a significant increase in strike capacity, VPM is itself a low technical risk design change, integrating existing or scaled-up components.

The *Virginia*-class' modular design has been evolving to meet the Nation's changing needs, and the production line has proven adaptable. All Block III submarines are on track to continue *Virginia*-class' established record of early deliveries, including the first Block III submarine, PCU *North Dakota* (SSN-784). The design and certification work being done on the Block III *Virginia* payload tubes, which will be similar to the tubes used for VPM, will further reduce risk to the VPM design by ensuring that mature, operational systems are utilized throughout the module. It is important to note that the design and certification work on the lead Block III ship, PCU *North Dakota*, is not in the critical path for delivery and the ship will

still deliver prior to its contractual delivery date. A similar, but smaller, investment was made in Block IV to reduce total ownership costs.

The VPM in Block V is the next evolution of this established and proven design process. The Navy has extensive experience with lengthening existing submarine designs, most recently with the in-production addition of the multi-mission module to USS *Jimmy Carter* (SSN-23). The Block V design labor estimates are consistent with the *Jimmy Carter*'s redesign, and are only 12 percent of the original *Virginia*-class design for over three times the strike capacity.

The Navy has already completed advanced modeling to assess the impact of the VPM on *Virginia*-class submarine performance characteristics and has determined that this modification will not prevent the ship from meeting any of its current assigned key performance parameters. The JROC has validated the requirement modification to the *Virginia*-class submarine by approving the Strike Capability Change Capability Development Document in December 2013.

The validated Capability Development Document contained key performance parameters for cost and schedule as well as system performance. The Department has been finding ways to reduce costs since the project's inception. The current concept has been reduced in length by over 20 feet. This design will prove less costly to both design and build, ensuring the ability to meet the cost constraints in the Capability Development Document.

#### CHANGES TO ASSESSING NAVAL FLEET SIZE

63. Senator AYOTTE. Secretary Stackley, I understand that the Navy has revised its guidelines for accounting for the size of the Navy's battle force. For example, under the old counting rules, as of April 3, 2014, we had 283 ships and submarines, but under the new counting rules, we have 289 ships and submarines. Similarly, in fiscal year 2015 under the old counting rules, we will have 274 ships and submarines and under the new counting rules, we will have 284 ships and submarines—a difference of 10. What was the reason for this change?

Mr. STACKLEY. The new counting methodology provides flexibility to the combatant commanders to assess the near-term environment and changing situations faced in meeting the demands of the Defense Strategic Guidance. This could include forward deployed naval forces, whether self-deployable or non-self-deployable, being added to the battle force count dependent on the mission, location, and required capabilities.

The new counting methodology allows ship types routinely requested by the combatant commands and allocated through the GFMAP to be counted on a case-by-case basis with the recommendation of the CNO and approved by the Secretary of the Navy. This will be a temporary authorization to include these ships in the ship count and will remain in effect until the ships are no longer requested in the GFMAP or are retired (whichever occurs first).

For example, in fiscal year 2015, the specific impact of the new counting methodology resulted in adding 10 Patrol Craft forward deployed naval forces currently operating in the 5th Fleet, reducing the MCM ship count from 11 ships to the 8 ships forward deployed naval forces in 5th Fleet and 7th Fleet, adding 1 high speed transport assigned to U.S. Pacific Command (PACOM) to replace the currently leased WestPac Express, and adding the 2 hospital ships (T-AH).

As of May 23, 2014, the Navy's battle force consists of 288 ships.

64. Senator AYOTTE. Secretary Stackley, what vessels are you now counting that you weren't counting previously?

Mr. STACKLEY. The specific impact of the new counting methodology will result in adding 10 Patrol Craft forward deployed naval forces currently operating in the 5th Fleet, reducing the MCM ship count from 11 ships to the 8 ships forward deployed naval force in 5th Fleet and 7th Fleet, adding 1 high speed transport assigned to PACOM to replace the currently leased WestPac Express and adding the 2 hospital ships (T-AH) in fiscal year 2015.

#### AMERICAN NAVAL DOMINANCE

65. Senator AYOTTE. Secretary Stackley, in his March 5, 2014, prepared statement, Secretary Hagel said, "With the proliferation of more advanced military technologies and other nations pursuing comprehensive military modernization, we are entering an era where American dominance on the seas, in the skies, and in space can no longer be taken for granted." With respect to our dominance on the seas, do you share Secretary Hagel's assessment, and what must be done to address it?

Mr. STACKLEY. The U.S. Navy remains the most dominant Navy in the world. However, we face a broad array of diverse threats and challenges to the Nation's security over the next 10 years, including those that place at risk our dominance on the seas. The proliferation of A2/AD systems—to include mines, anti-ship cruise and ballistic missiles, and integrated air and missile defenses—is one of the most pressing concerns for Navy. The nature of modern and emerging threats is such that generally no single system or capability can defeat them; we must rely on a comprehensive, layered approach using multiple Navy, Joint, and allied solutions to wherever possible attack every link in an adversary's A2/AD effects chain. To support this approach, Navy uses a rigorous analytic agenda to inform investment decisions across multiple time horizons and scenarios.

Similarly, no single platform can support defeating the threats; we must build the future force needed to meet the full range of missions required of the Department of the Navy in support of the DSG. To achieve this goal, the Navy reported to Congress in January 2013 the results of the Force Structure Assessment which included a battle force requirement of 306 ships. The Department of the Navy continues to build toward this balanced force with the procurement of 7 ships in fiscal year 2015 and 44 ships over the FYDP (fiscal year 2015 to fiscal year 2019).

The Navy maintains its steady momentum towards achieving the Force Structure Assessment requirements, but more than the size of our force, the threats before us require that priority be placed on investment in the development and fielding of those weapon systems that will provide the future force decisive advantage on, above, and below the sea. These include the MCM systems associated with the LCS mission package; the DDG-51 Flight III upgrade that provides the increased air and missile defense capability necessary to counter the rising threat to our carrier battle groups; advancements in electronic warfare contained within programs such as the E/A-18G Growler electronic attack aircraft, the Next Generation Jammer, and the Shipboard Electronic Warfare Improvement Program (Block III); continual advancements in underwater superiority delivered by the Advanced Processing Build program (commonly referred to as Acoustic Rapid COTS Insertion, ARCI); the further development and fielding of integrated warfare capabilities, such as Navy Integrated Fire Control-Counter Air that vastly increases the over-the-horizon capability of our air defense systems; the development of the Offensive Anti Surface Warfare missile that will provide extended reach and lethality against surface threats to our force; and the introduction of fifth generation manned and unmanned aircraft within our carrier air wings.

These capabilities all currently in development, when combined with our planned new construction and modernization programs, such as Aegis destroyer and cruiser modernization, will provide our Navy the balanced, capable force in number required to ensure our continued dominance.

However, alongside the threat beyond our shores, the threat posed by sequestration and declining budgets, which places these investments at risk, likewise places at risk that dominance on, above, and below the seas that our Nation has long been able to take for granted.

#### ATTACK SUBMARINE DEMAND

66. Senator AYOTTE. Secretary Stackley, you acknowledge in your joint statement that submarines provide the opportunity to operate in A2/AD environments and provide valuable ISR, as well as indication and warning of potential hostile action. Attack submarines are also effective in ASW and undersea warfare—creating a significant conventional deterrent. What percentage of overall combatant command attack submarine requests are being met by the Navy?

Mr. STACKLEY. Through the GFMAP, the Navy sourced approximately 53 percent of overall combatant command attack submarine requests in fiscal year 2014.

67. Senator AYOTTE. Secretary Stackley, what percentage of PACOM attack submarine requests are being met?

Mr. STACKLEY. Specific combatant command demand and sourcing levels are classified and can be provided via classified channels, if desired.

#### SHIP FORCE STRUCTURE CHANGES

68. Senator AYOTTE. Secretary Stackley, what specific ships are planned for retirement as part of the President's fiscal year 2015 budget?

Mr. STACKLEY. The 14 ships listed below are planned for retirement in fiscal year 2015:

USS *Taylor* (FFG-50)  
 USS *Gary* (FFG-51)  
 USS *McClusky* (FFG-41)  
 USS *Elrod* (FFG-55)  
 USS *Simpson* (FFG-56)  
 USS *Vandegrift* (FFG-48)  
 USS *Samuel B Roberts* (FFG-58)  
 USS *Kauffman* (FFG-59)  
 USS *Rodney M Davis* (FFG-60)  
 USS *Ingraham* (FFG-61)  
 USS *Peleliu* (LHA-5)  
 USS *La Jolla* (SSN-701)  
 USS *Norfolk* (SSN-714)  
 USNS *Rainier* (T-AOE-7)

69. Senator AYOTTE. Secretary Stackley, what specific ships are planned for commissioning in fiscal year 2015?

Mr. STACKLEY. Fiscal year 2015 projected commissionings (as of May 8, 2014):

PCU *America* (LHA-6)  
 PCU *Milwaukee* (LCS-5)  
 PCU *Jackson* (LCS-6)  
 PCU *Zumwalt* (DDG-1000)

#### TOMAHAWK

70. Senator AYOTTE. Secretary Stackley, what changed in the past year to cause the Navy to revise its Inventory Objective for Tomahawks from 9,150 missiles to 7,900 missiles—a 15 percent drop in 1 year?

Mr. STACKLEY. Two factors drove Navy's Tomahawk's combat requirement down during the fiscal year 2015 President's budget naval munitions requirements process. One is the force structure change which placed 11 guided missile cruisers in phased modernization status. The other is the Joint Chiefs of Staff, Office of the Secretary of Defense, combatant commands, and the Services implemented changes to the threat development and weapon allocation process. These threat/weapon allocation changes resulted in reduced overmatch situations where fewer weapon are required to meet the same military objective.

71. Senator AYOTTE. Secretary Stackley, what specific requirement input was provided by the combatant command?

Mr. STACKLEY. Within the DOD munitions requirements process, the combatant commands submit threat data allocated within their area of responsibility. The threat data is subsequently used by the Military Services to develop munitions inventory requirements. In fiscal year 2014, the combatant commands, in conjunction with the Joint Chiefs of Staff, the Office of the Secretary of Defense, and the Services, implemented changes to the threat development and weapon allocation process. These threat/weapon allocation changes resulted in reduced overmatch situations where fewer Tomahawk weapons are required to meet the same military objective.

72. Senator AYOTTE. Secretary Stackley, was this change threat based?

Mr. STACKLEY. Two factors drove Navy's Tomahawk's combat requirement down during the fiscal year 2015 President's budget naval munitions requirements process. One is the force structure change which placed 11 guided missile cruisers in phased modernization status. The other is the Joint Chiefs of Staff, the Office of the Secretary of Defense, the combatant commands, and the Services implemented changes to the threat development and weapon allocation process. These threat/weapon allocation changes resulted in reduced overmatch situations where fewer weapons are required to meet the same military objective.

73. Senator AYOTTE. Secretary Stackley, has the Navy conducted a business case analysis comparing the costs associated with production shut-down and start-up versus ordering a minimum number of missiles to keep the production lines open, and if so, what was your analysis, and if not, why not?

Mr. STACKLEY. We assess that with the procurement of the fiscal year 2015 Tomahawk/BLK IV missiles (QTY 100 with deliveries complete during the fourth of 2017) the Navy has sufficient all-up-round missile assets in inventory to address planned worse case operational needs through 2024 when the Next Generation Land Attack Weapon begins delivery to the fleet.

With the truncation of Tomahawk BLK IV missile production in fiscal year 2015, the Navy avoids the expenditure of more than \$300 million per year for procurement of unnecessary inventory (approximately \$1.0 billion for fiscal year 2015 through fiscal year 2019 or approximately \$1.3 billion for fiscal year 2015 through fiscal year 2020 (program of record)).

In the event that a production restart is required, it is estimated approximately \$300 million to \$400 million of non-recurring restart costs would be incurred over a 2- to 3-year period. This estimate is based upon similar costs incurred by the Tomahawk program when the production line had to be restarted in the past.

The Navy plans to continue to support the Tomahawk capability by deploying and maintaining the weapon system on major surface and subsurface combatants through fiscal year 2047. The Navy has also planned and budgeted for: Tomahawk modernization starting in fiscal year 2015; a major missile recertification program commencing in fiscal year 2019, providing an additional 15-year service life to the BLK IV weapons; major spare/repair parts procurements; and a missile depot to sustain the Tomahawk engineering/logistics core and mitigate risk to the Tomahawk industrial base.

74. Senator AYOTTE. Secretary Stackley, what measures will the Navy put in place to ensure that the follow-on program will be delivered on-time, on-budget, and meets all of the operational requirements?

Mr. STACKLEY. The Department of the Navy has already initiated the requisite activities needed to ensure on-time/on-budget delivery of Next Generation Land Attack Weapon warfighting capabilities. The capabilities based assessment for Next Generation Land Attack Weapon is ongoing and will inform the next steps in the requirements and acquisition process (i.e. completion of the initial capabilities document, analysis of alternatives, and acquisition strategy).

To ensure the lowest cost technically acceptable acquisition program, the Navy plans to hold a full and open competition for Next Generation Land Attack Weapon with Milestone B in fiscal year 2018 and an early operational capability delivered in fiscal year 2024. During this process, our systems engineering activities will be worked collaboratively with industry to ensure understanding of the key technologies and risks; our cost analysts will have the best available industry/government data to understand cost and cost drivers; and our contracting strategy will incentivize appropriate contactor behavior to deliver the requisite capabilities on-time and on-budget.

In keeping with the provisions of the new DOD 5000.02, our plan also includes integration of better buying power initiatives; the empowerment and accountability of the program executive officer and program manager; and the right balance of executive leadership and oversight to provide the needed insight on program progress at key knowledge and decision points.

